LEASE MANAGEMENT

COLLEGE NAME: Sri Ramakrishna College Of Arts And Science For Women
COLLEGE CODE: bru28

TEAM ID: NM2025TMID24206

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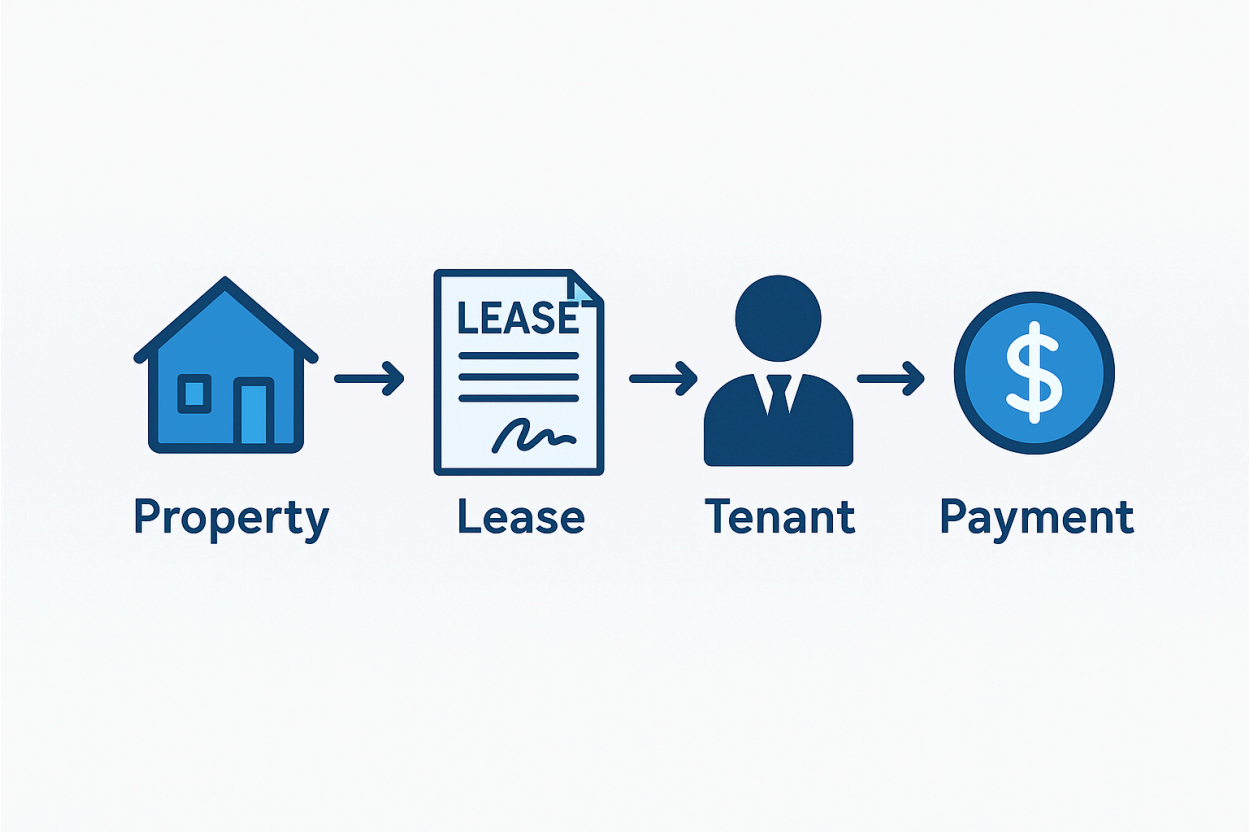
Introduction

Lease Manage/ment is the process of handling agreements between a property owner (landlord) and a tenant. It involves maintaining property records, managing tenant details, tracking lease start and end dates, ensuring timely rent payments, and automating approvals. In Salesforce, lease management can be simplified using custom objects (Property, Tenant, Lease, Payment), workflows, approval processes, triggers, and email notifications.



Purpose

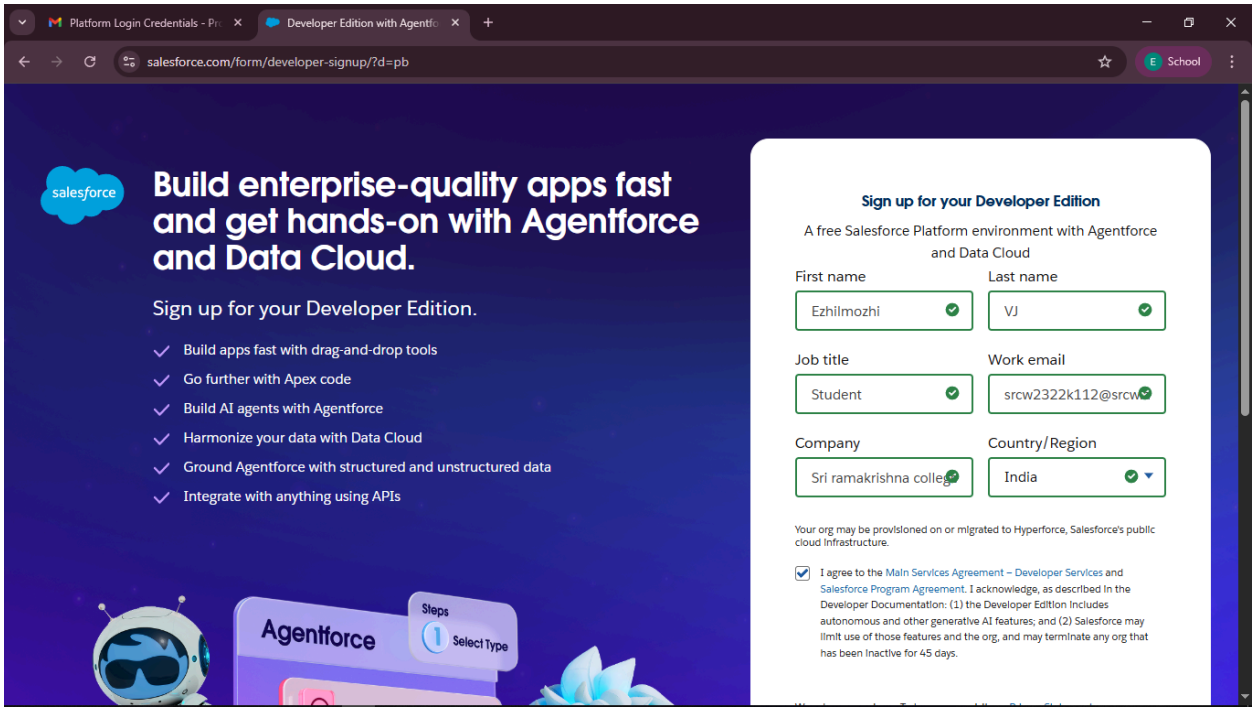
- To centralize property, tenant, and lease information.

- To automate approval of lease requests and tenant leaving requests.
- To ensure compliance by validating lease dates (e.g., End Date > Start Date).
- To send timely notifications for approvals, rejections, and payments.
- To track monthly rent payments with reminders and receipts.
- To improve transparency between landlords, tenants, and administrators.

DEVELOPMENT PHASE:

The development phase of the Lease Management system was carried out in 11 structured milestones to ensure smooth progress and systematic completion. It began with creating the custom objects (Property, Tenant, Lease, and Payment) followed by setting up their tabs and a Lightning App to bring them together. Next, fields and lookup relationships were added to establish data connections, and validation rules like ensuring the end date is greater than the start date were implemented for accuracy. In the following milestones, email templates were designed for tenant leaving, approvals, rejections, and payments. Two approval processes were built to manage tenant requests and vacancy checks. The phase also included writing Apex triggers and handlers with test classes to automate critical actions, and flows for handling monthly payments. Finally, a scheduled class was developed for recurring tasks, completing the 11 milestones of development. Each step contributed to building a robust and automated lease management system.

Creating Developer Account:



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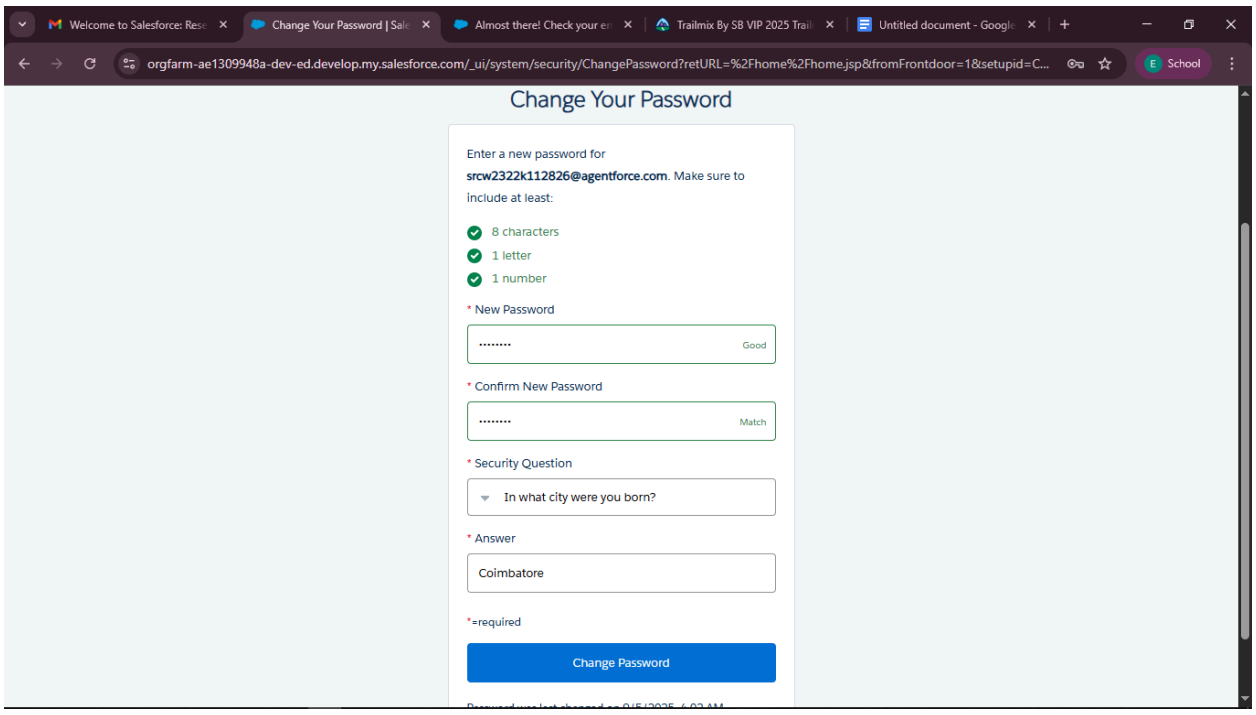
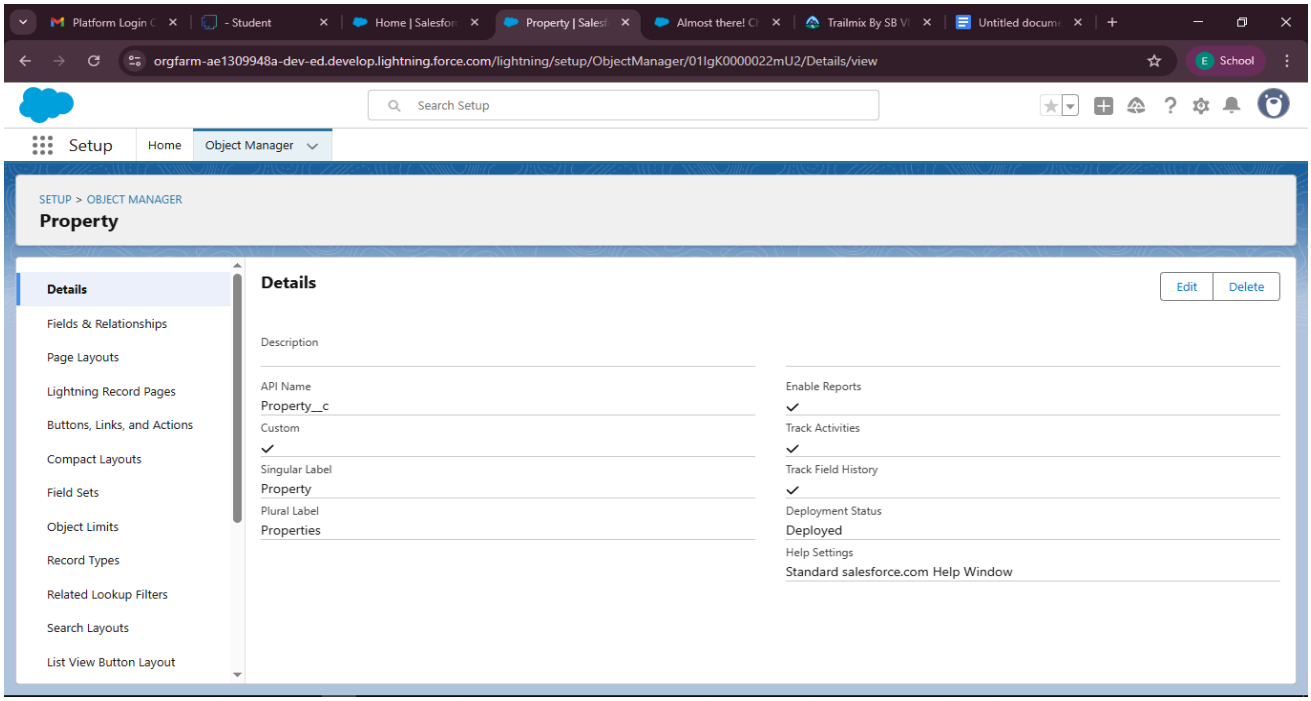
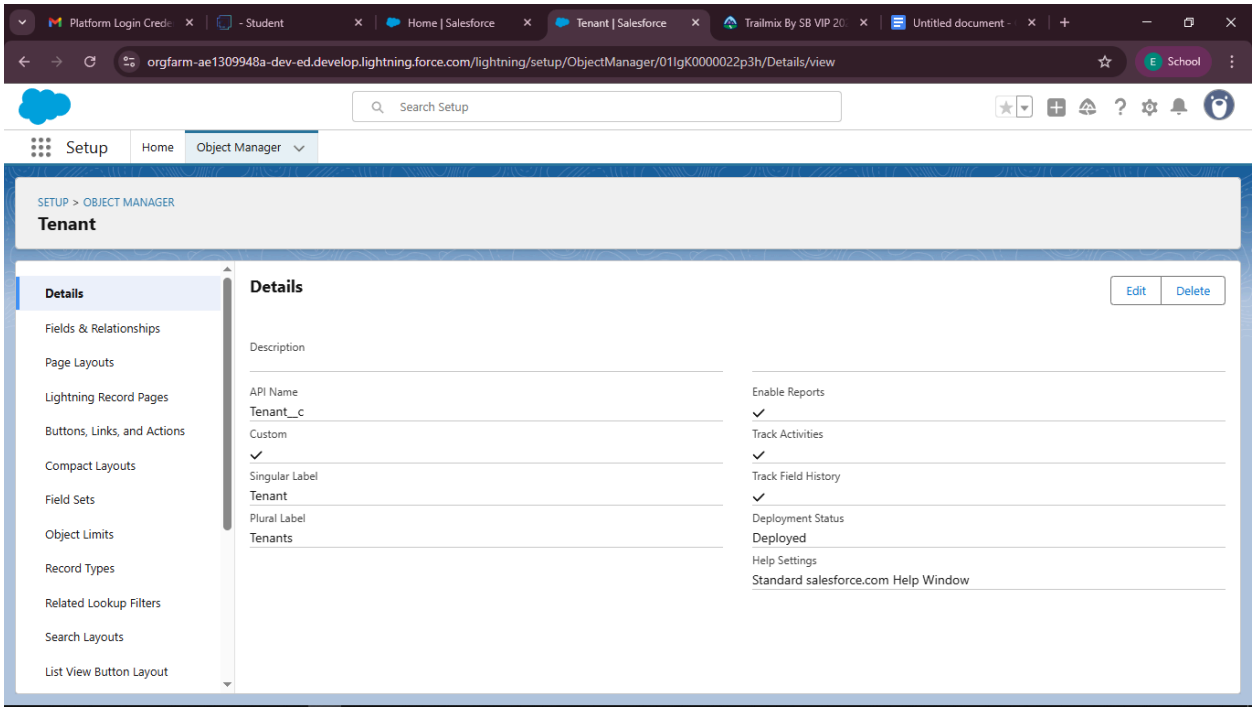
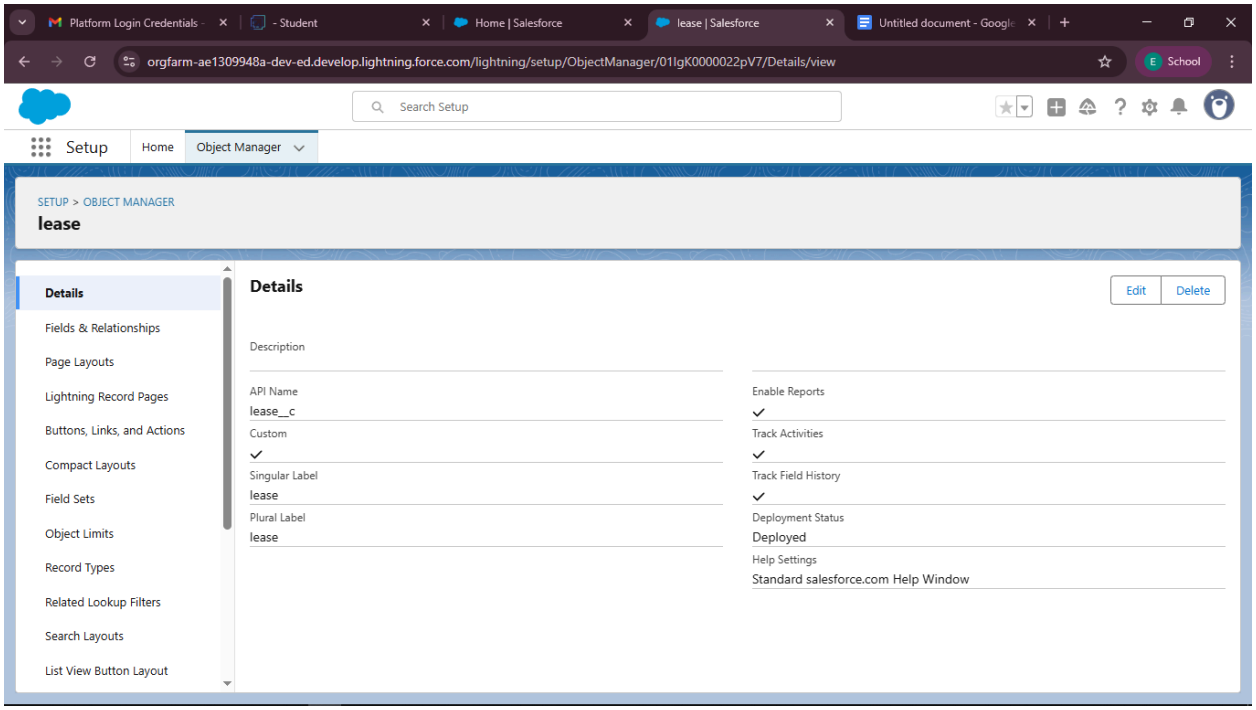


OBJECT CREATION:



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- Student
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Page Layouts
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Buttons, Links, and Actions
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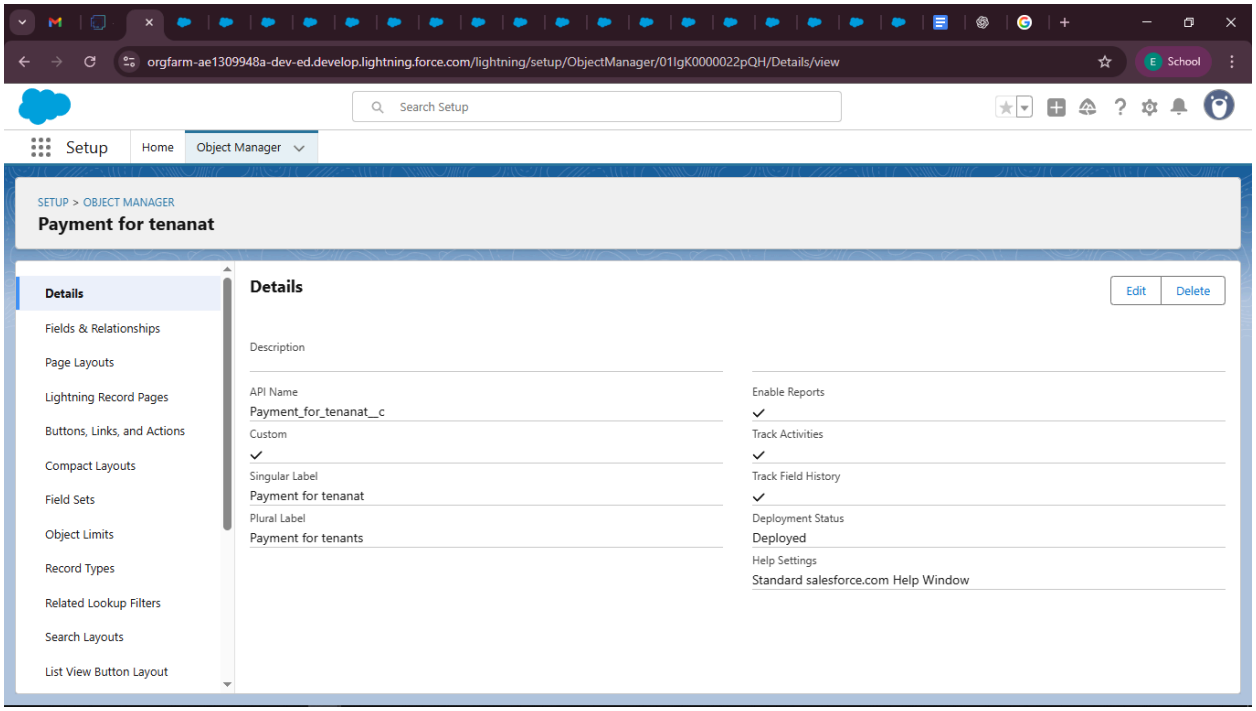
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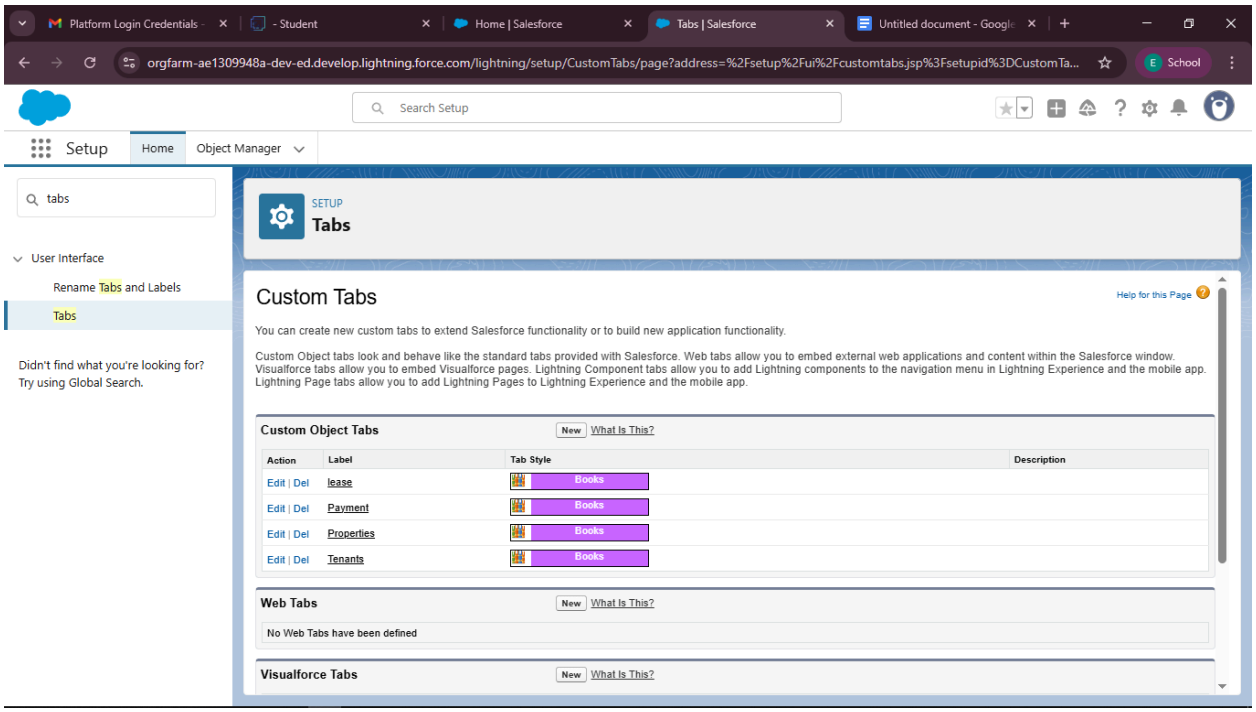
TABS:



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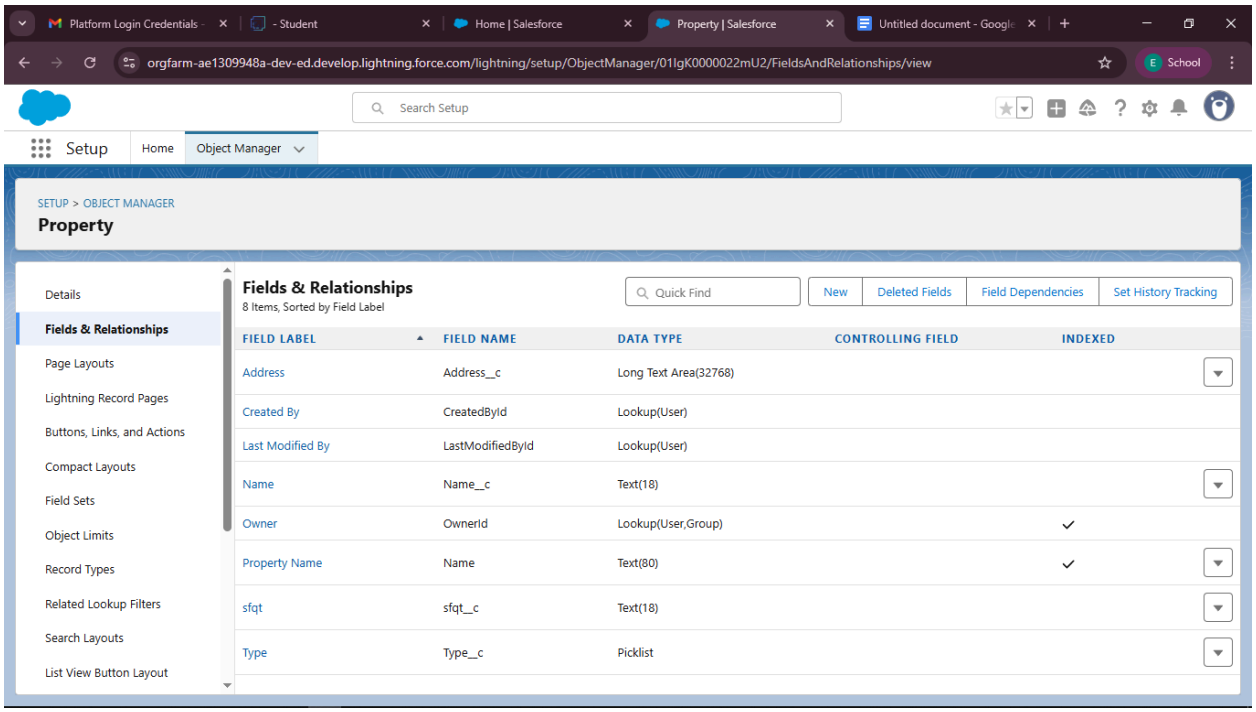

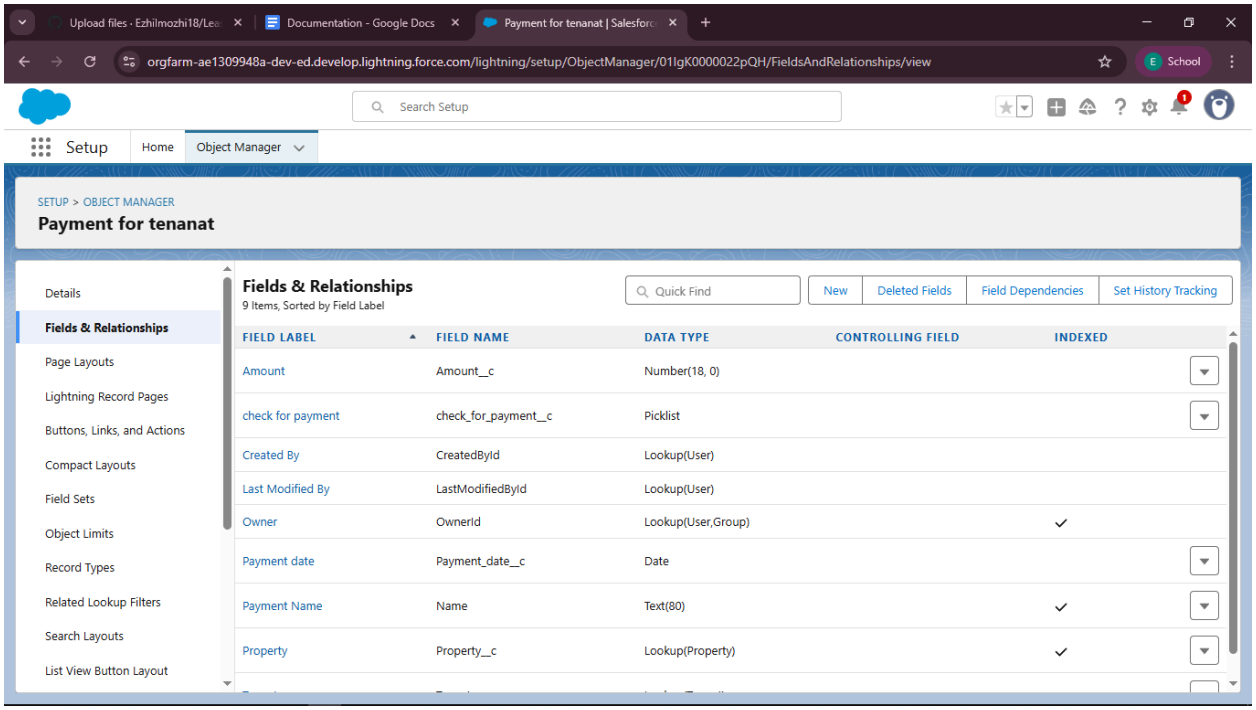
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Object Limits
Record Types
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Search Layouts
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9 Items, Sorted by Field Label
Quick Find
New
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Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
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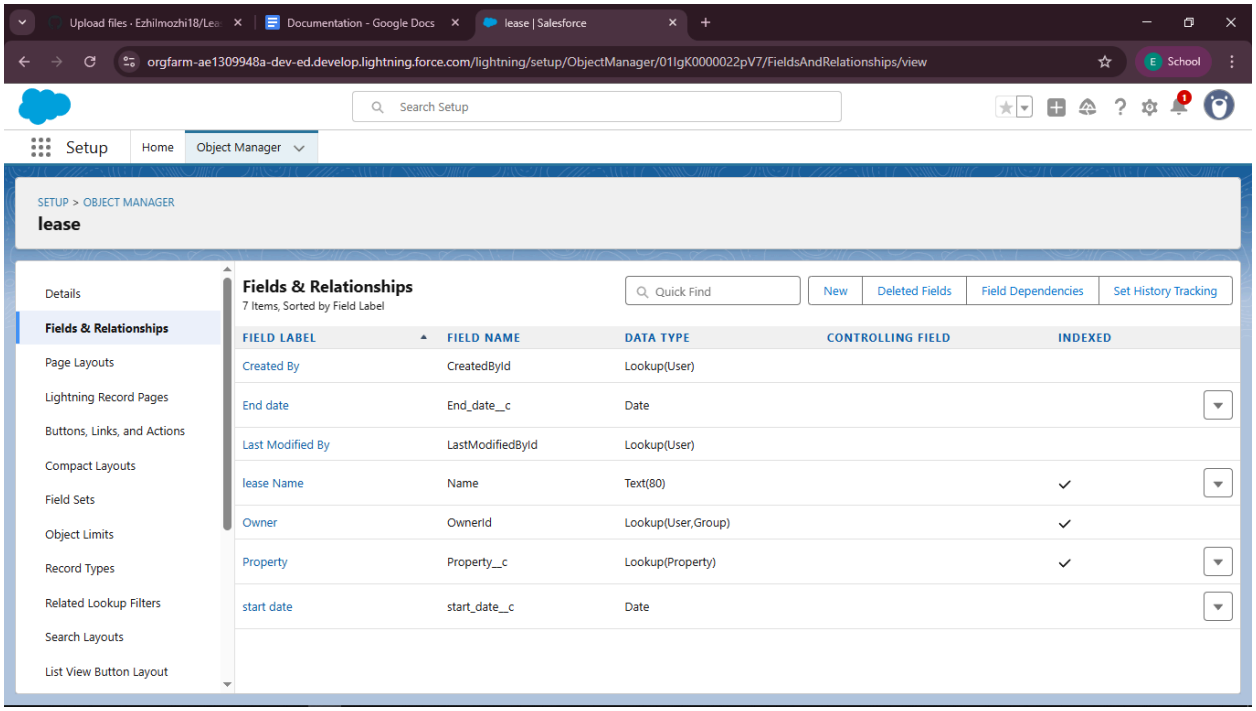
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Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
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FIELD NAME
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CONTROLLING FIELD
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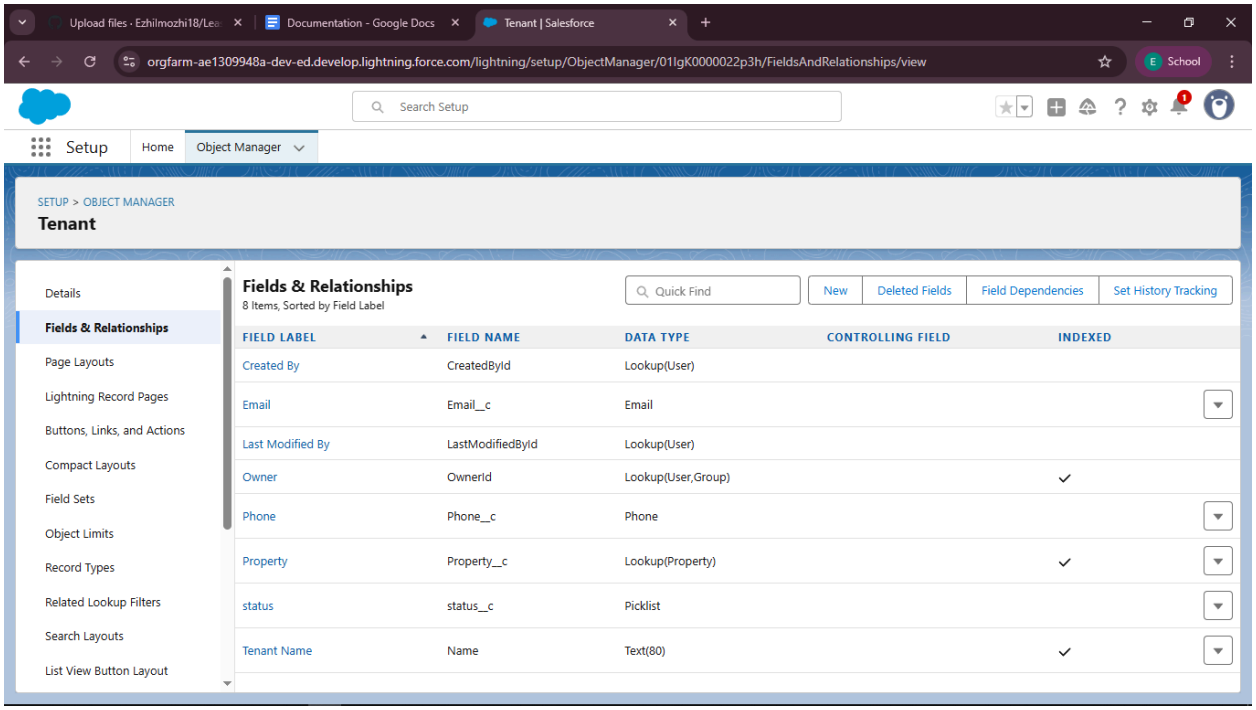
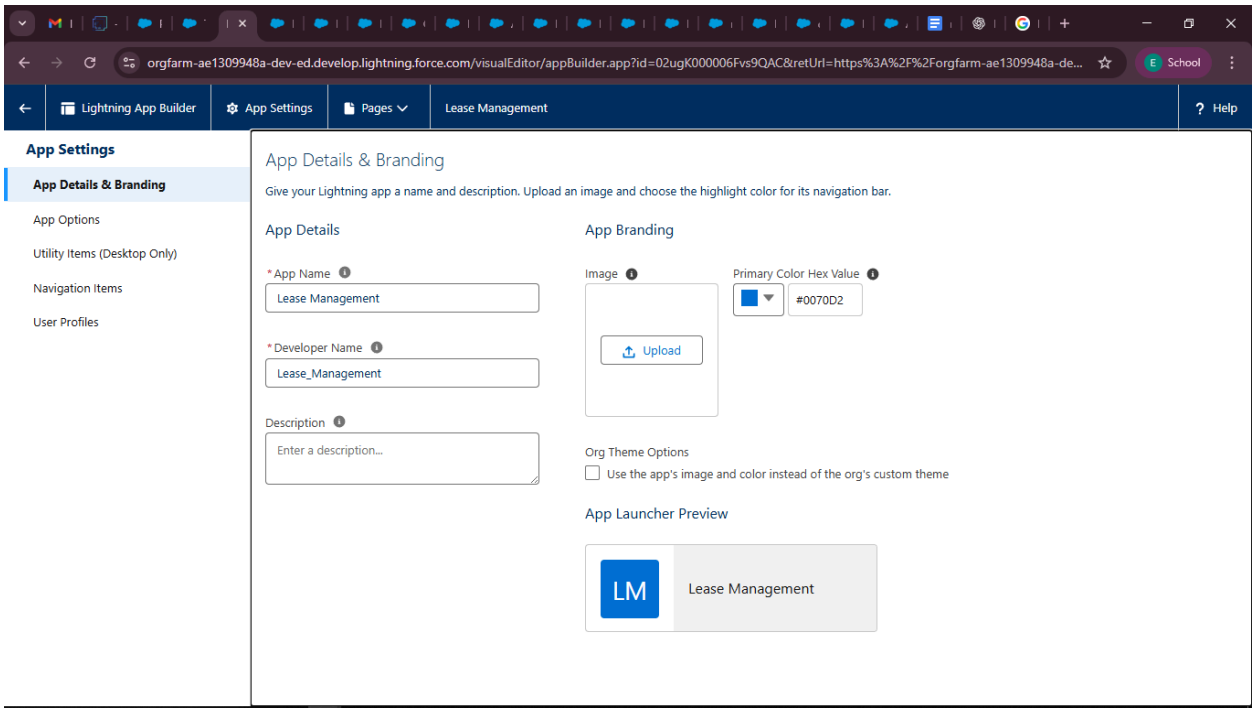
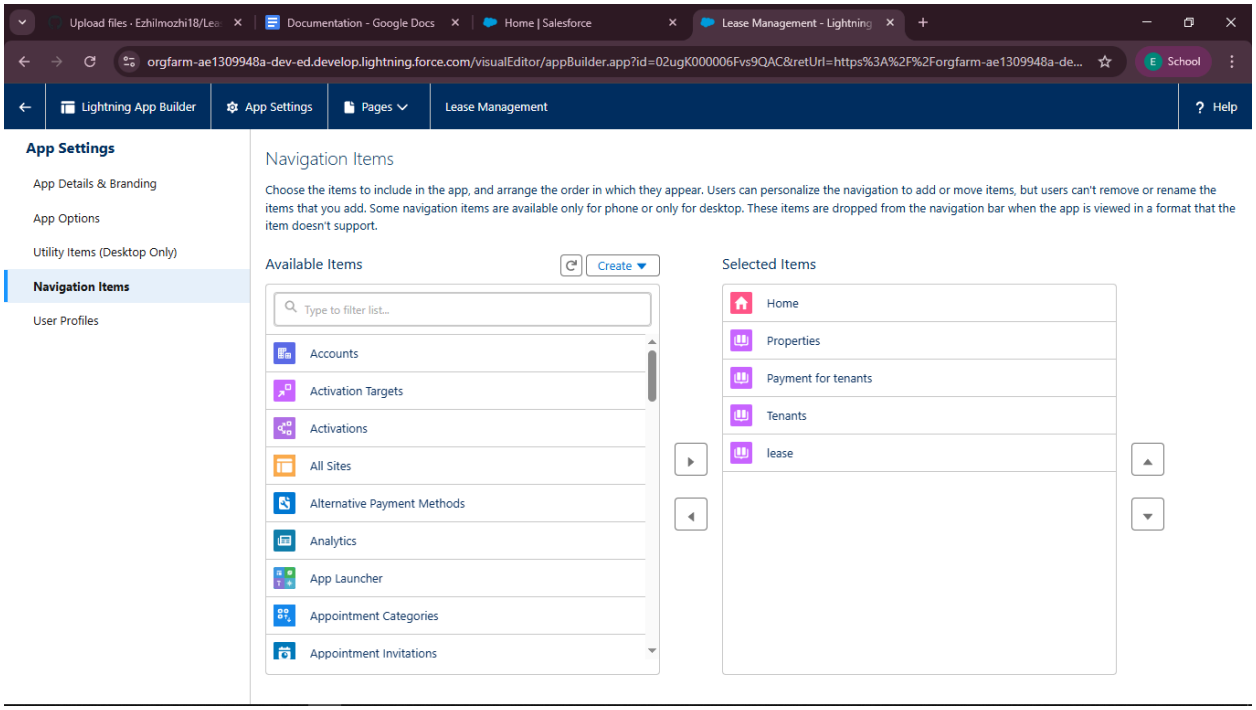


THE LIGHTNING APP:

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Lease Management
Help
App Settings
App Details & Branding
App Options
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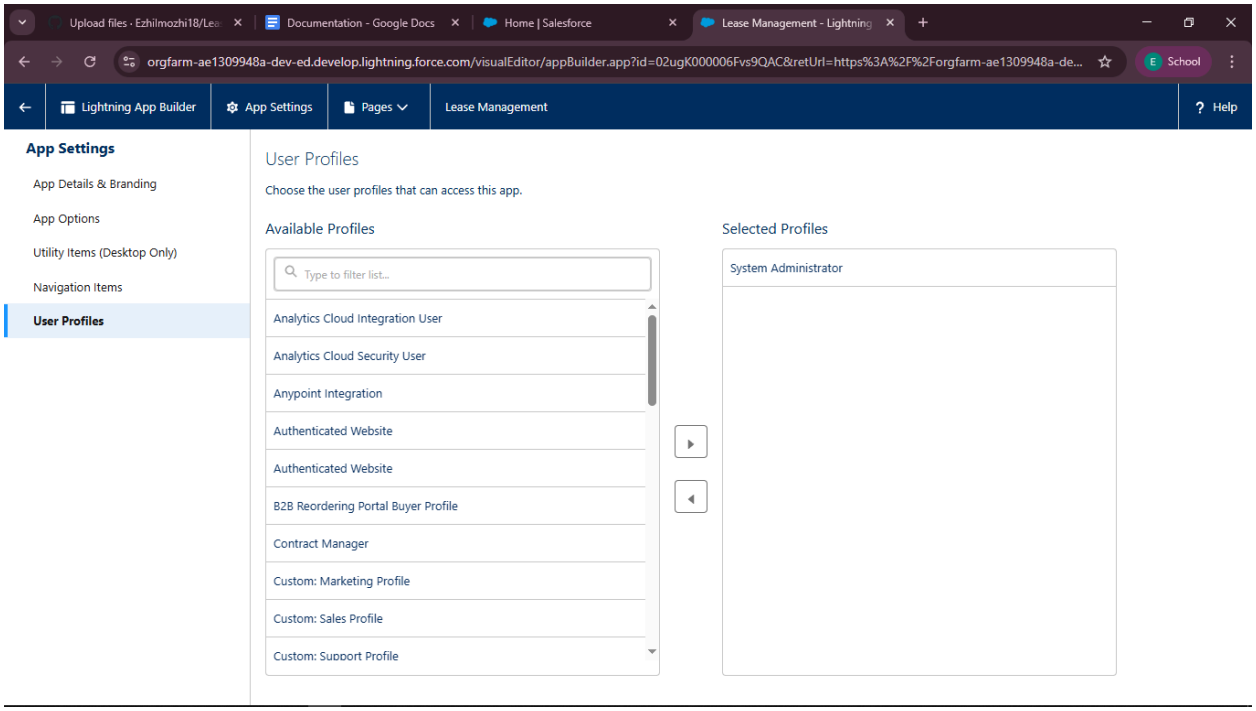
Navigation Items
User Profiles
Navigation Items
Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.
Available Items
Create
Type to filter list...
Accounts
Activation Targets
Activations
All Sites
Alternative Payment Methods
Analytics
App Launcher
Appointment Categories
Appointment Invitations
Selected Items
Home
Properties
Payment for tenants
Tenants
lease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App Options
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Choose the user profiles that can access this app.
Available Profiles
Type to filter list...
Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
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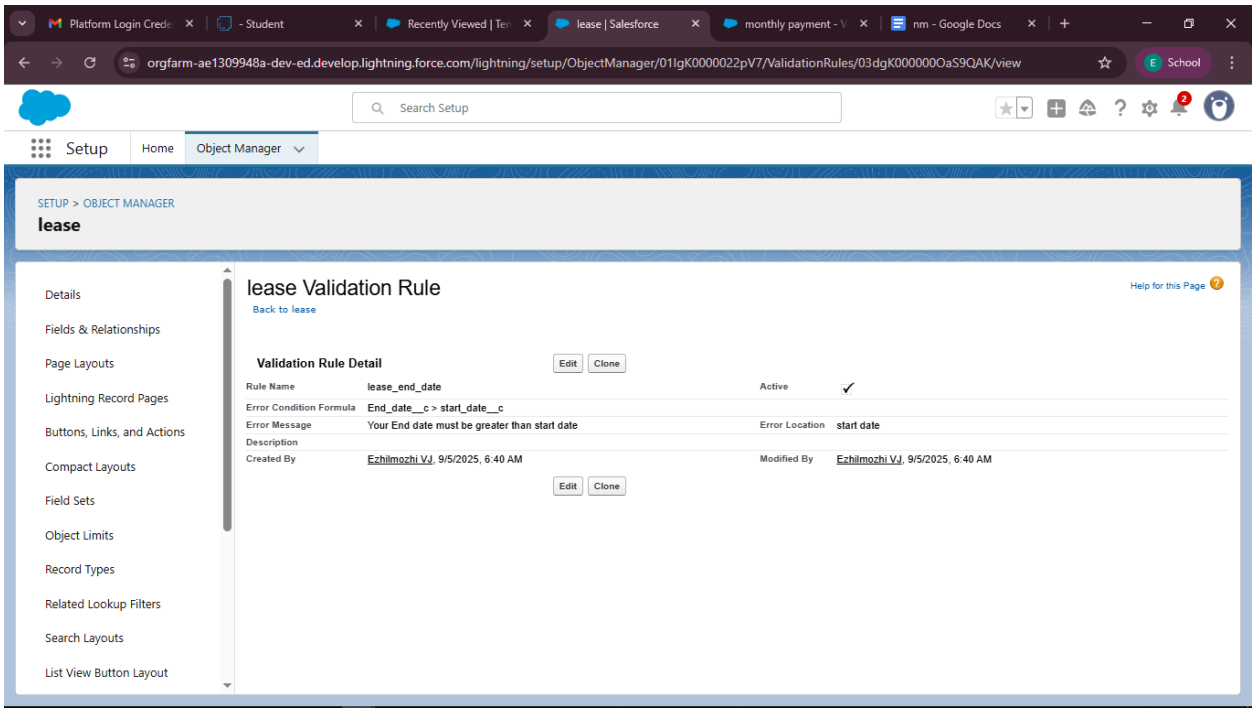
B2B Reordering Portal Buyer Profile
Contract Manager
Custom: Marketing Profile
Custom: Sales Profile
Custom: Support Profile
Selected Profiles
System Administrator

VALIDATION RULE:



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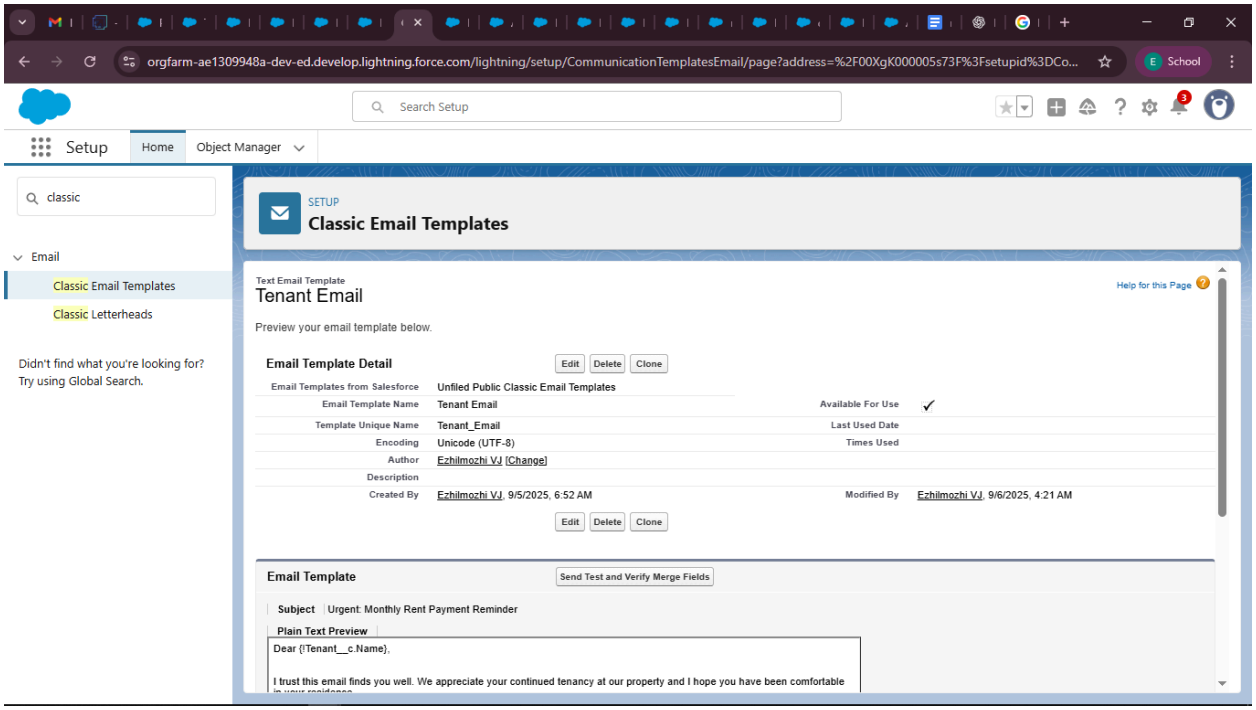
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Didn't find what you're looking for?
Try using Global Search.
SETUP
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Text Email Template
Tenant Email
Help for this Page
Preview your email template below.
Email Template Detail
Edit
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Clone
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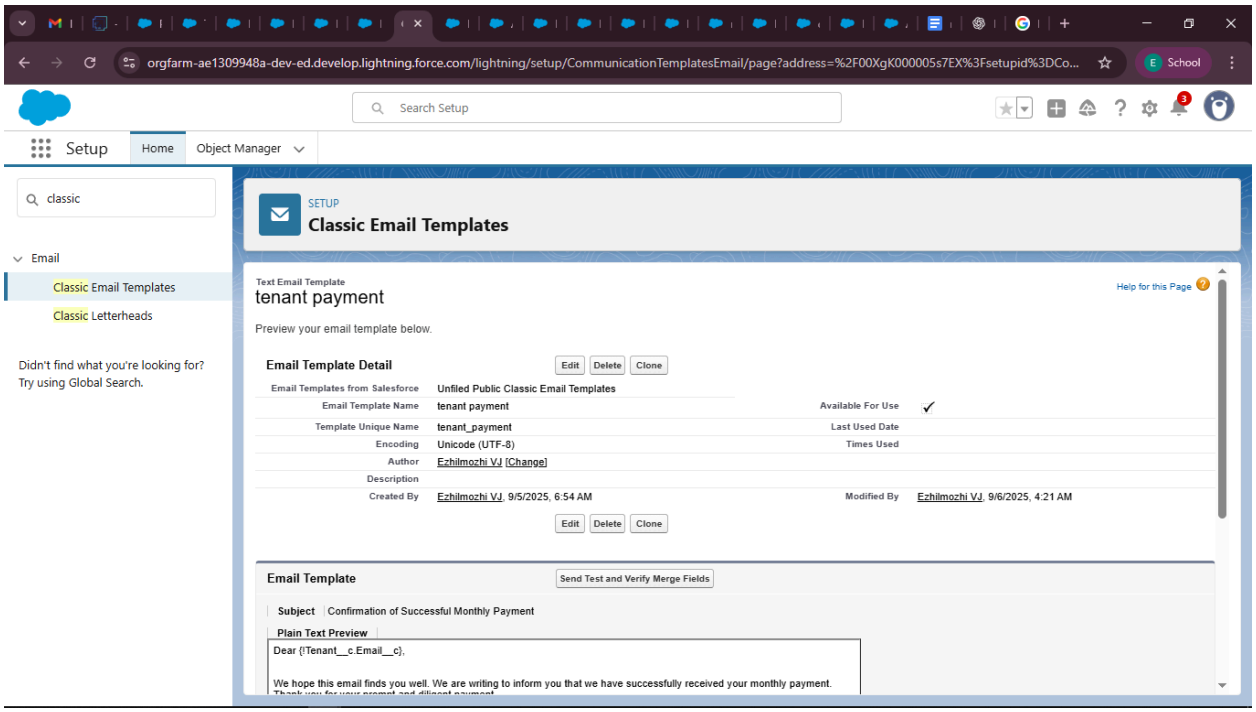
Tenant Email
Available For Use
Template Unique Name
Tenant_Email
Last Used Date
Encoding
Unicode (UTF-8)
Times Used
Author
Ezhilmozhi VJ [Change]
Description
Created By
Ezhilmozhi VJ, 9/5/2025, 6:52 AM
Modified By
Ezhilmozhi VJ, 9/6/2025, 4:21 AM
Email Template
Send Test and Verify Merge Fields
Subject
Urgent: Monthly Rent Payment Reminder
Plain Text Preview
Dear {!Tenant__c.Name},
I trust this email finds you well. We appreciate your continued tenancy at our property and I hope you have been comfortable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Didn't find what you're looking for?
Try using Global Search.
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Text Email Template
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Help for this Page
Preview your email template below.
Email Template Detail
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Clone
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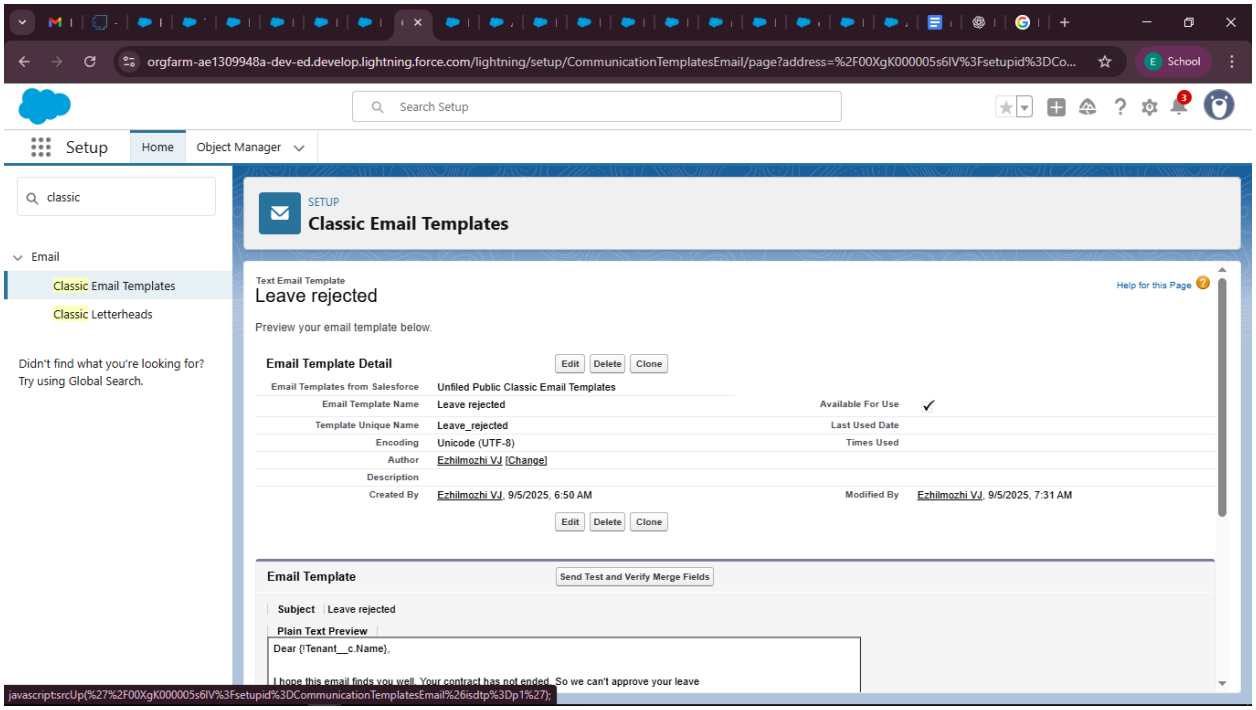
Unfiled Public Classic Email Templates
Email Template Name
tenant payment
Available For Use
Template Unique Name
tenant_payment
Last Used Date
Encoding
Unicode (UTF-8)
Times Used
Author
Ezhilmozhi VJ [Change]
Description
Created By
Ezhilmozhi VJ, 9/5/2025, 6:54 AM
Modified By
Ezhilmozhi VJ, 9/6/2025, 4:21 AM
Email Template
Send Test and Verify Merge Fields
Subject
Confirmation of Successful Monthly Payment
Plain Text Preview
Dear {!Tenant__c.Email__c},
We hope this email finds you well. We are writing to inform you that we have successfully received your monthly payment.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Classic Letterheads
Didn't find what you're looking for?
Try using Global Search.
SETUP
Classic Email Templates
Text Email Template
Leave rejected
Help for this Page
Preview your email template below.
Email Template Detail
Edit
Delete
Clone
Email Templates from Salesforce
Unfiled Public Classic Email Templates
Email Template Name
Leave rejected
Available For Use
Template Unique Name
Leave_rejected
Last Used Date
Encoding
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Author
Ezhilmozhi VJ [Change]
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Created By
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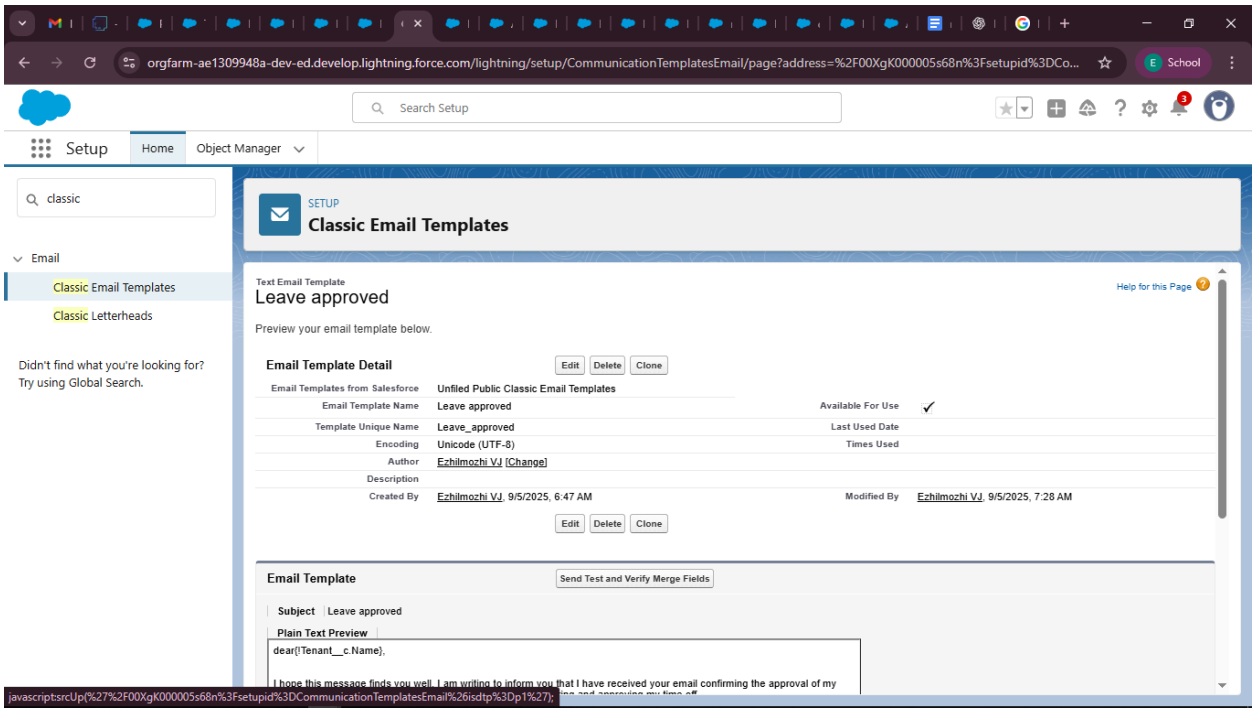
Modified By
Ezhilmozhi VJ, 9/5/2025, 7:31 AM
Email Template
Send Test and Verify Merge Fields
Subject
Leave rejected
Plain Text Preview
Dear {!Tenant__c.Name},
I hope this email finds you well. Your contract has not ended. So we can't approve your leave
javascript:srcUp(%27%2F00XgK000005s6lV%3Fsetupid%3DCommunicationTemplatesEmail%26isdtp%3Dp1%27);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Classic Letterheads
Didn't find what you're looking for?
Try using Global Search.
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Preview your email template below.
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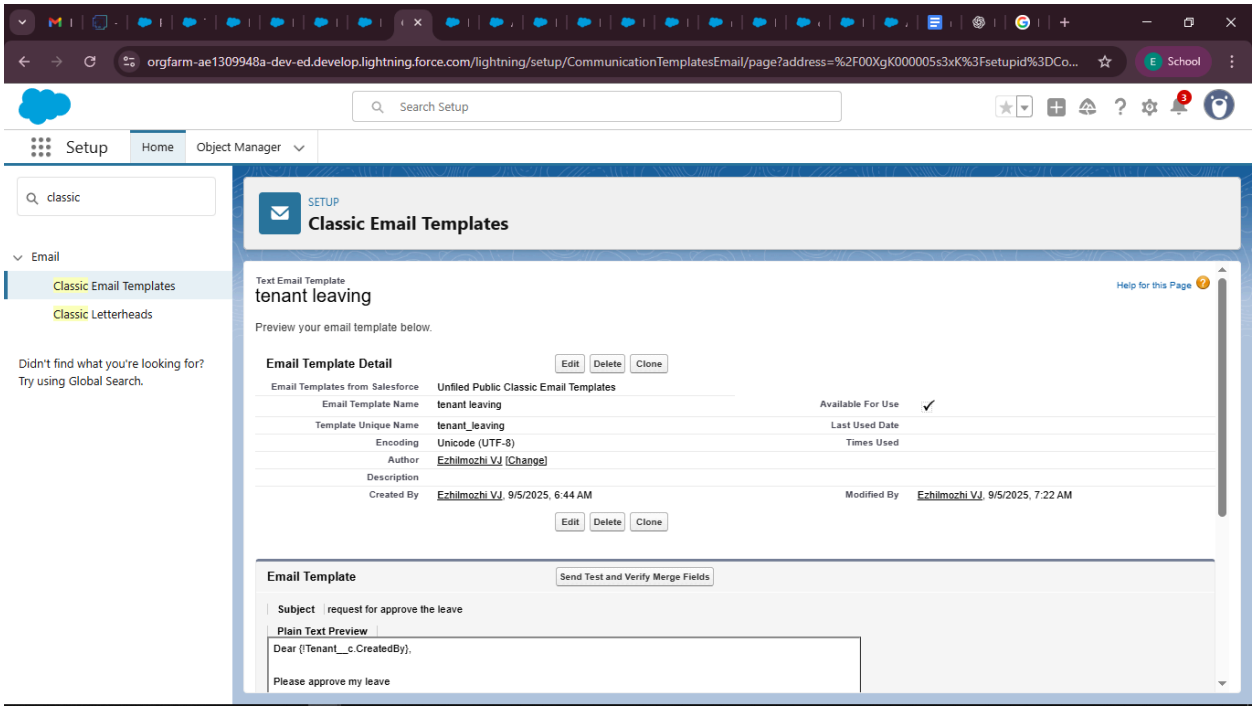
Email Templates from Salesforce
Unfiled Public Classic Email Templates
Email Template Name
Leave approved
Available For Use
Template Unique Name
Leave_approved
Last Used Date
Encoding
Unicode (UTF-8)
Times Used
Author
Ezhilmozhi VJ [Change]
Description
Created By
Ezhilmozhi VJ, 9/5/2025, 6:47 AM
Modified By
Ezhilmozhi VJ, 9/5/2025, 7:28 AM
Email Template
Send Test and Verify Merge Fields
Subject
Leave approved
Plain Text Preview
dear{!Tenant__c.Name},
I hope this message finds you well. I am writing to inform you that I have received your email confirming the approval of my
javascript:srcUp(%27%2F00XgK000005s68n%3Fsetupid%3DCommunicationTemplatesEmail%26isdtp%3Dp1%27);



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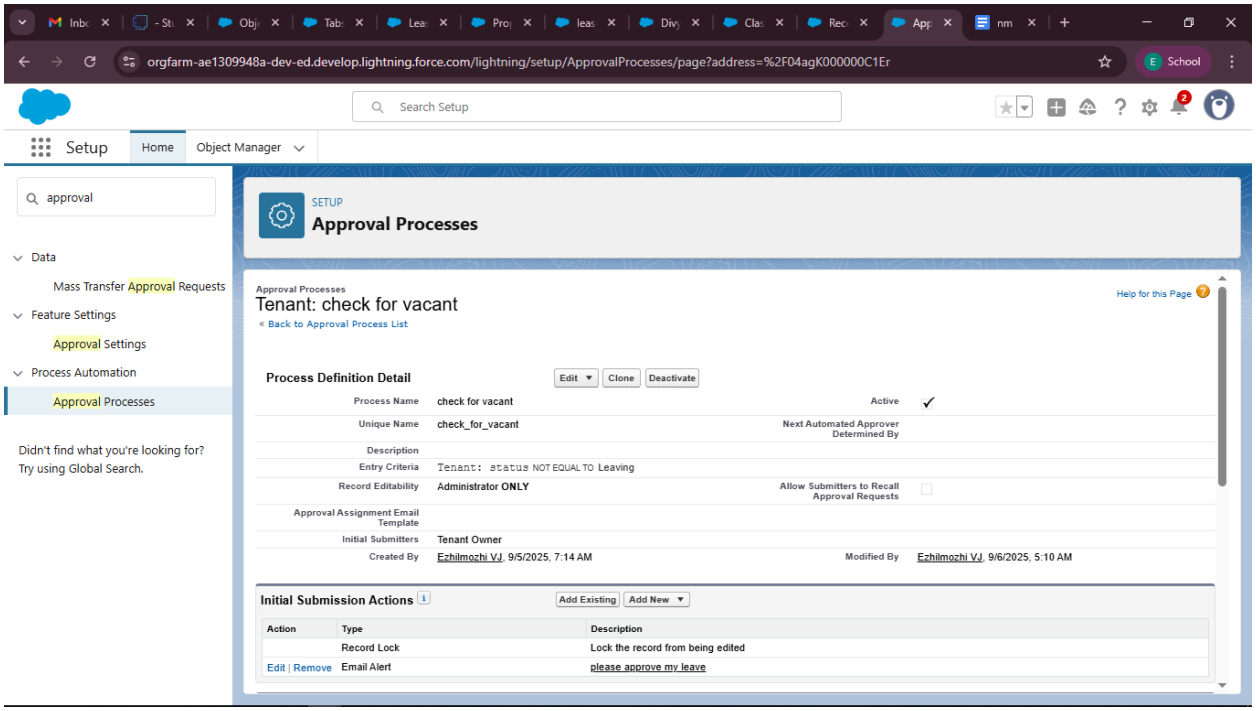

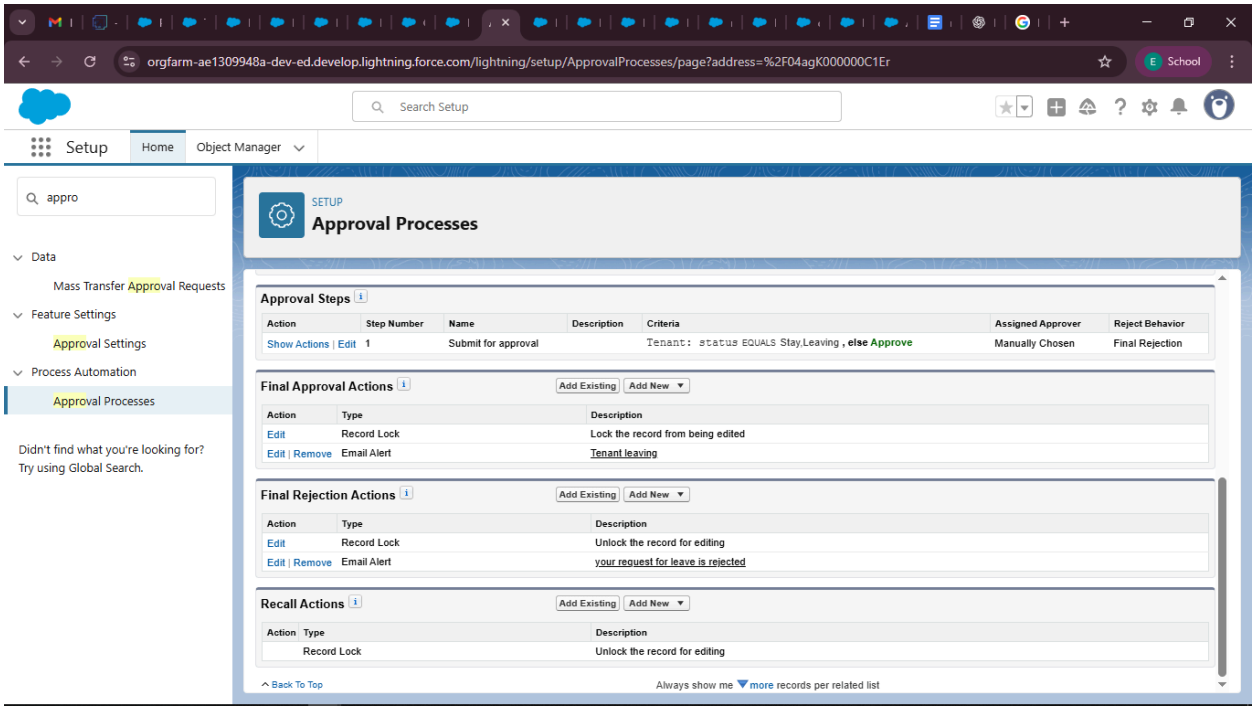

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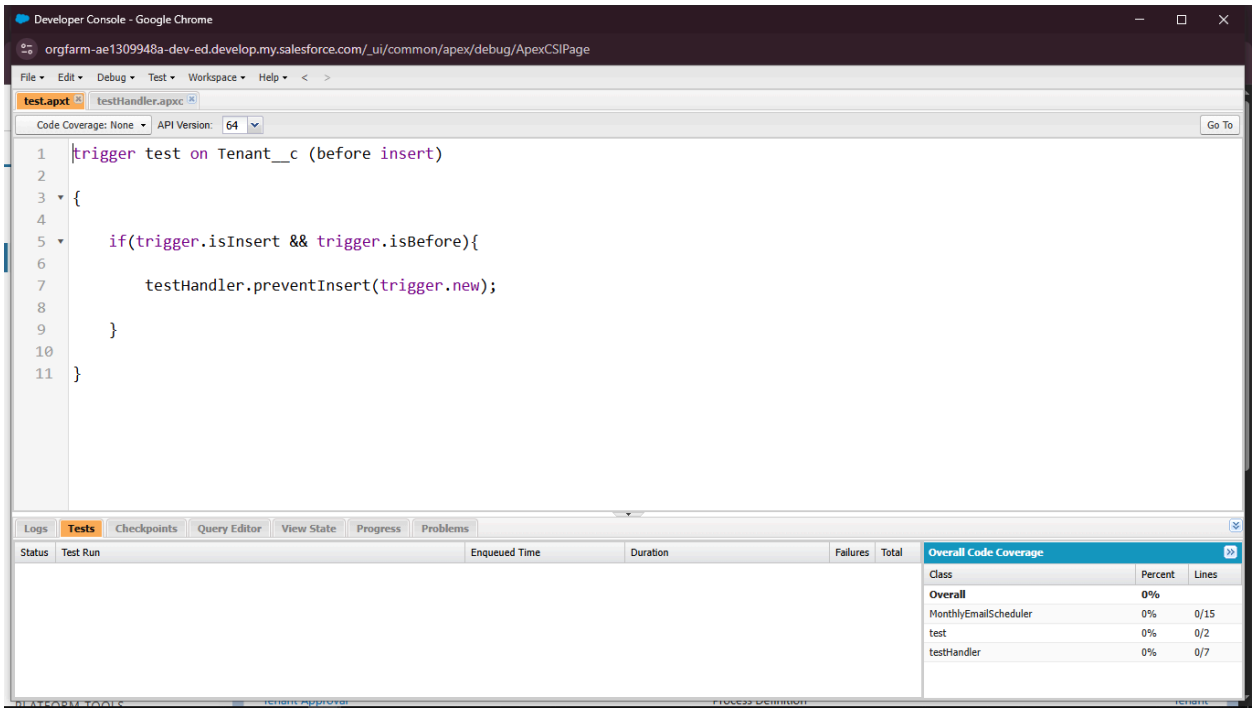

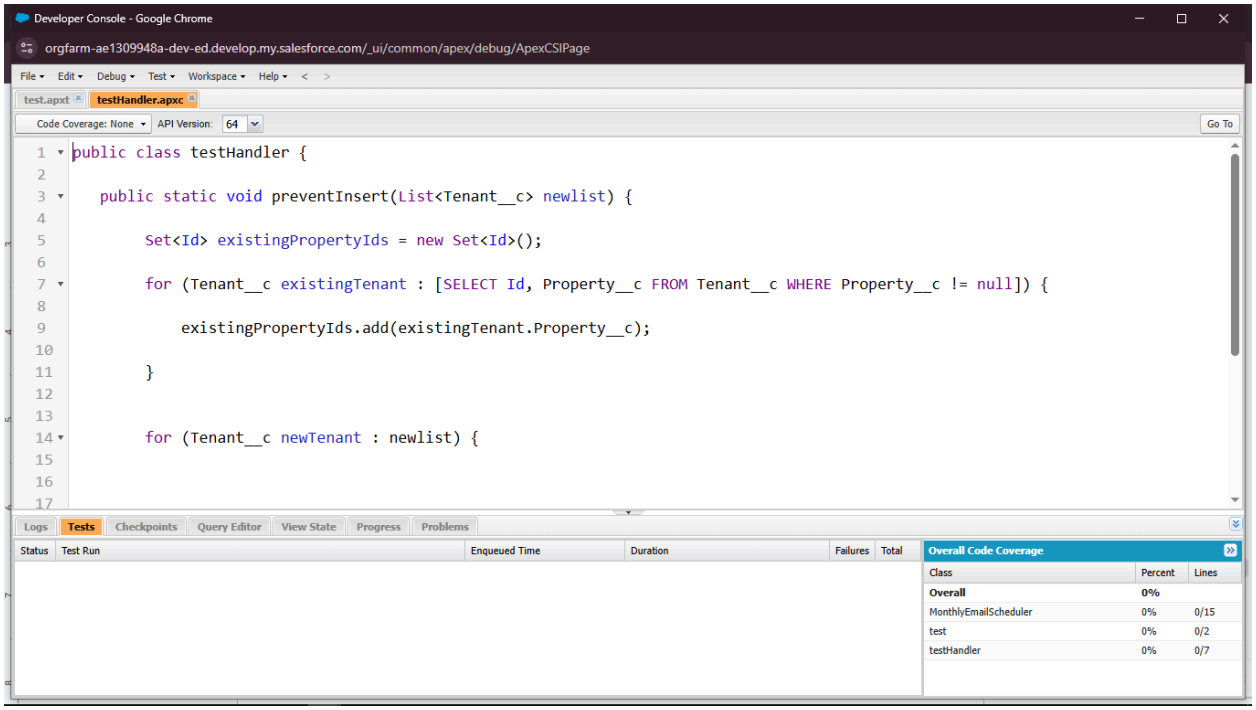
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File Edit Debug Test Workspace Help
test.apxt
testHandler.apxc
Code Coverage: None
API Version: 64
Go To
public class testHandler {
public static void preventInsert(List<Tenant__c> newlist) {
Set<Id> existingPropertyIds = new Set<Id>();
for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c WHERE Property__c != null]) {
existingPropertyIds.add(existingTenant.Property__c);
}
for (Tenant__c newTenant : newlist) {
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
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Test Run
Enqueued Time
Duration
Failures
Total
Overall Code Coverage
Class
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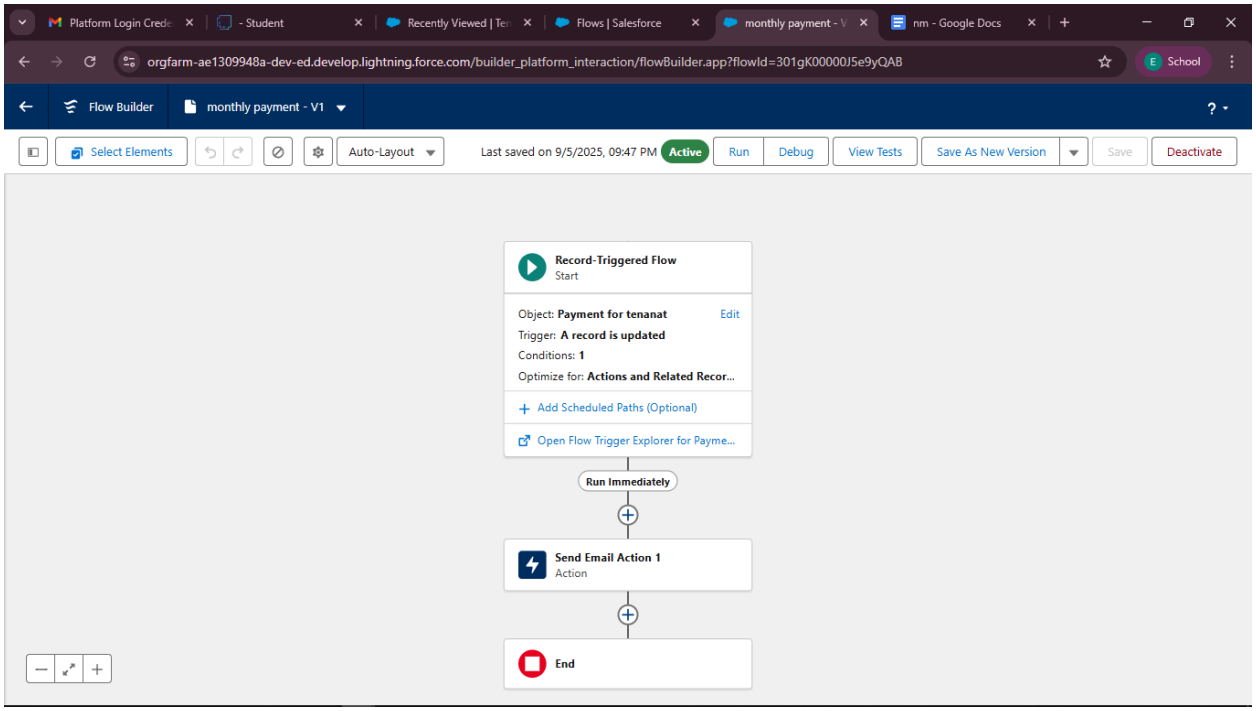
FLOWS: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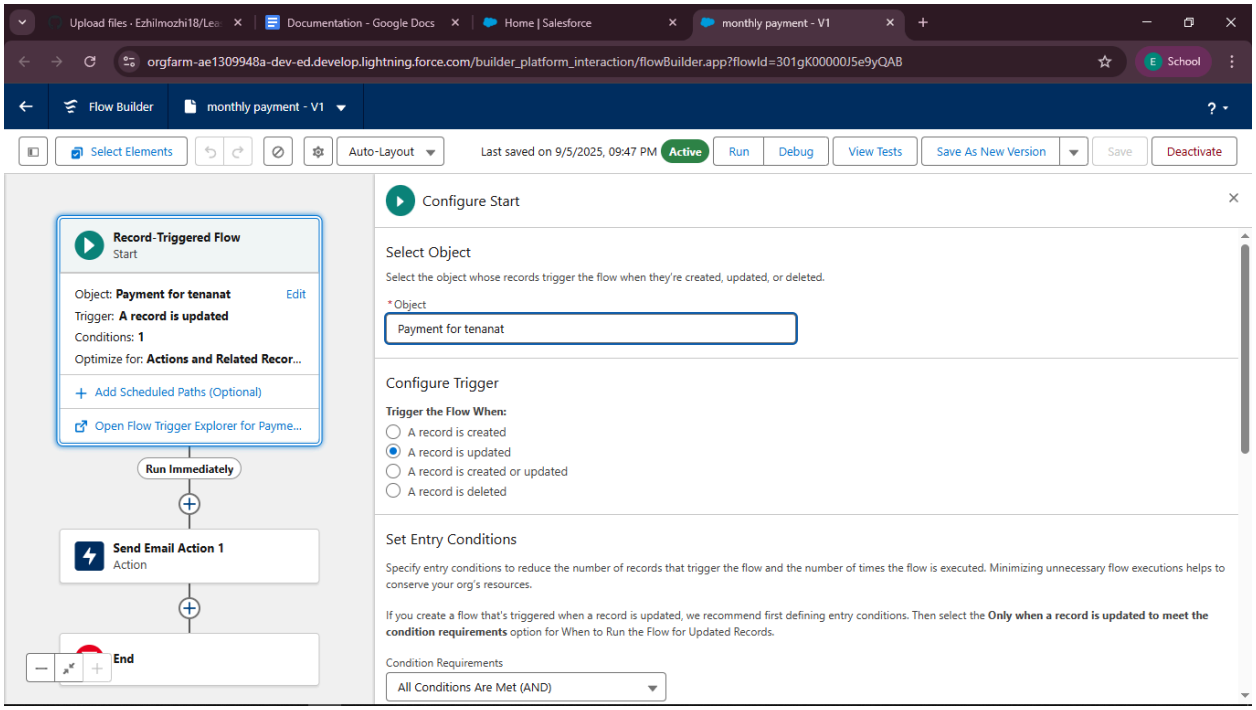
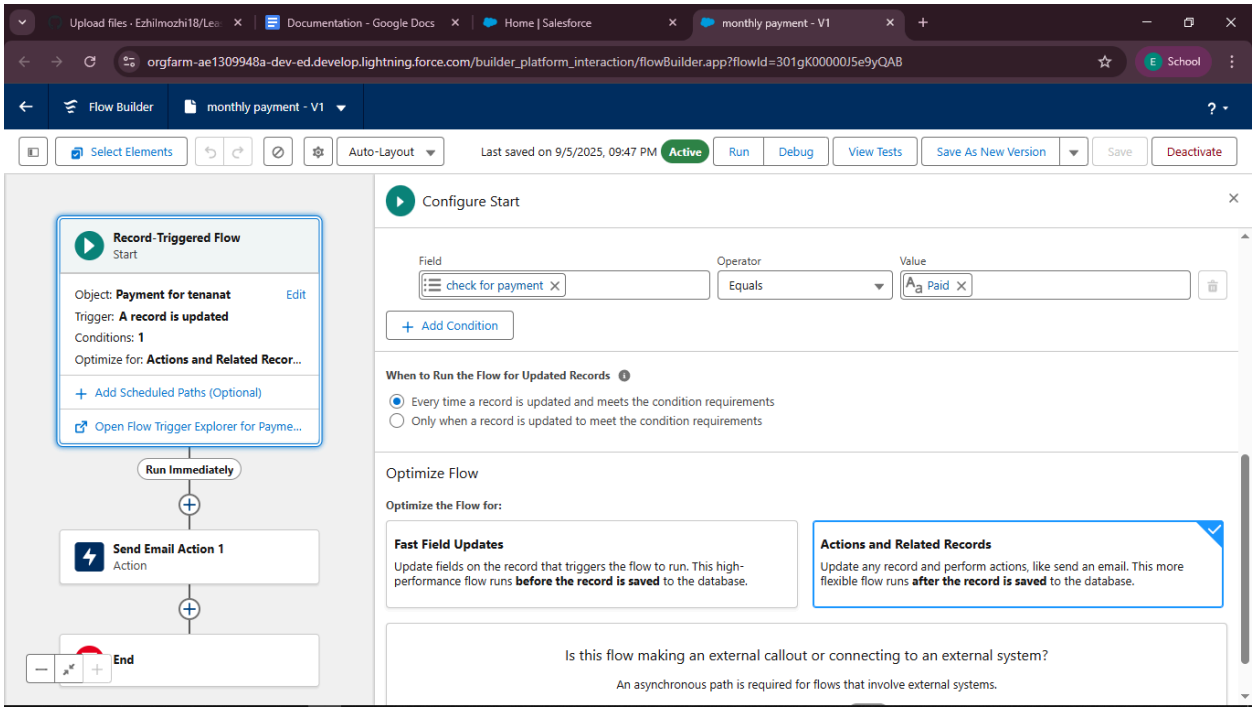
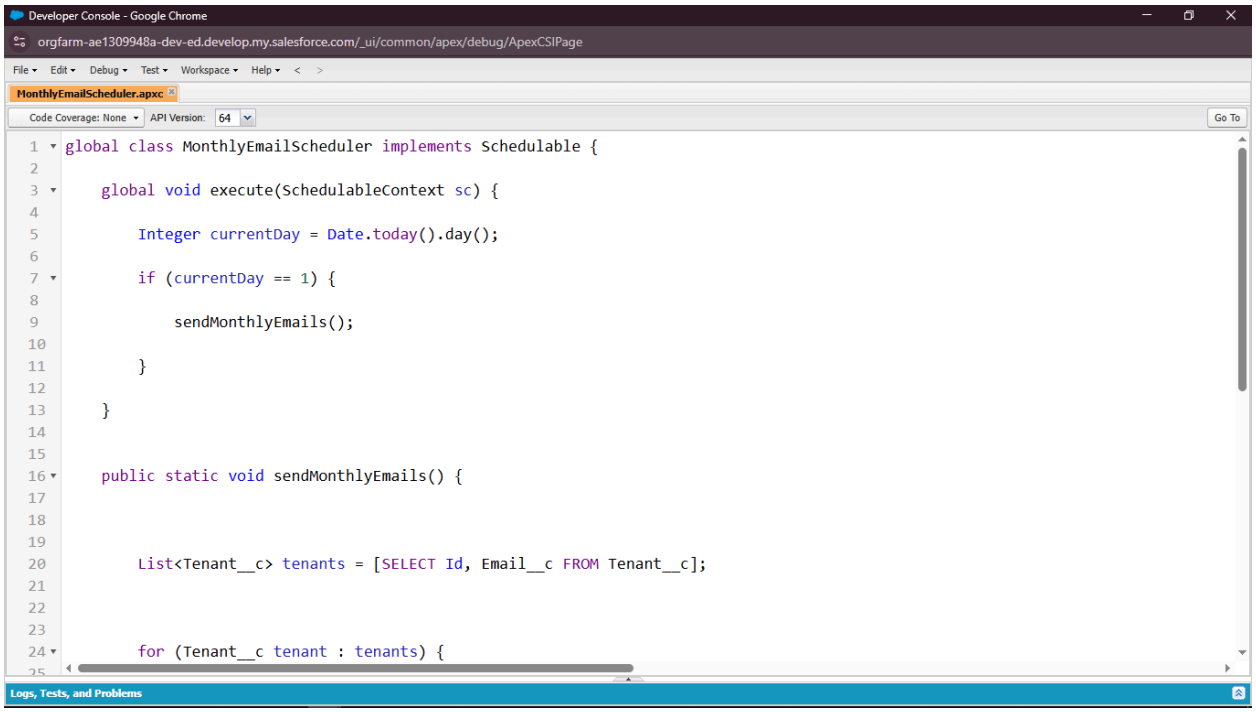
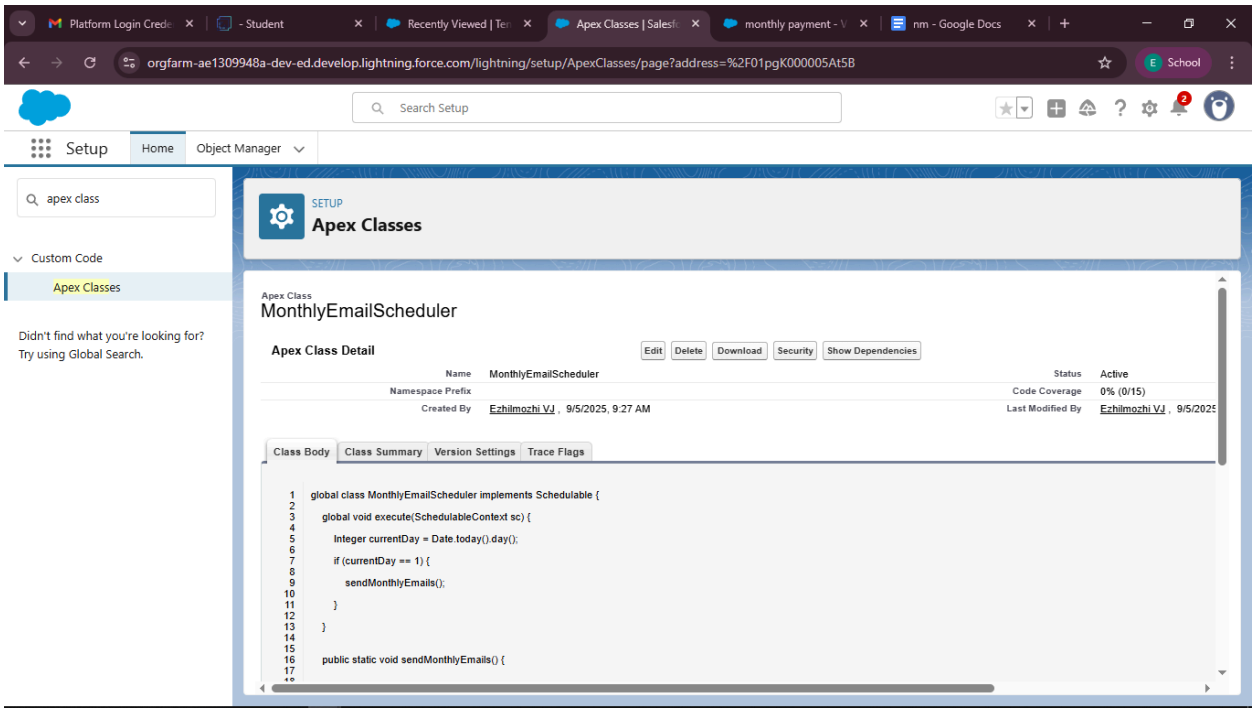
School
Flow Builder
monthly payment - V1
Select Elements
Auto-Layout
Last saved on 9/5/2025, 09:47 PM
Active
Run
Debug
View Tests
Save As New Version
Save
Deactivate
Record-Triggered Flow
Start
Object: Payment for tenanat
Edit
Trigger: A record is updated
Conditions: 1
Optimize for: Actions and Related Recor...
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Payme...
Run Immediately
Send Email Action 1
Action
End

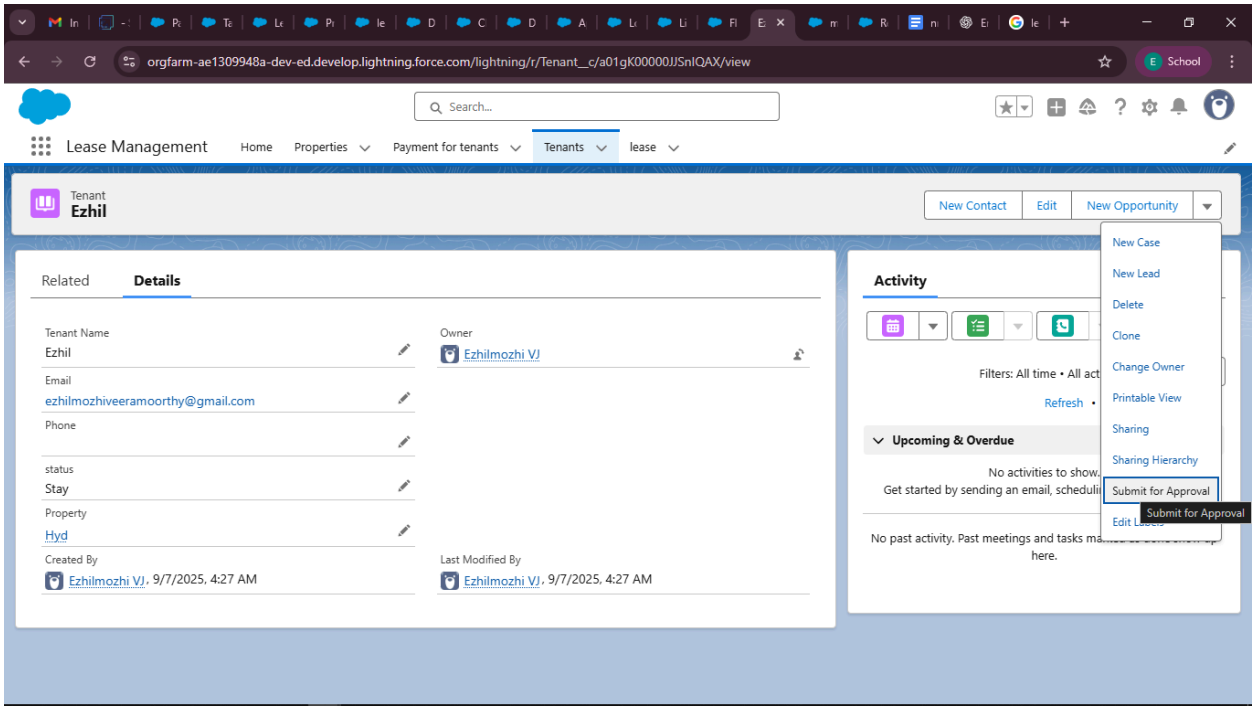

Upload files - Ezhilmozhi18/Lea
Documentation - Google Docs
Home | Salesforce
monthly payment - V1
orgfarm-ae1309948a-dev-ed.develop.lightning.force.com/builder_platform_interaction/flowBuilder.app?flowId=301gK00000J5e9yQAB
School
Flow Builder
monthly payment - V1
Select Elements
Auto-Layout
Last saved on 9/5/2025, 09:47 PM
Active
Run
Debug
View Tests
Save As New Version
Save
Deactivate
Record-Triggered Flow
Start
Object: Payment for tenanat
Edit
Trigger: A record is updated
Conditions: 1
Optimize for: Actions and Related Recor...
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Payme...
Run Immediately
Send Email Action 1
Action
End
Configure Start
Select Object
Select the object whose records trigger the flow when they're created, updated, or deleted.
* Object
Payment for tenanat
Configure Trigger
Trigger the Flow When:
A record is created
A record is updated
A record is created or updated
A record is deleted
Set Entry Conditions
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.
If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the Only when a record is updated to meet the condition requirements option for When to Run the Flow for Updated Records.
Condition Requirements
All Conditions Are Met (AND)

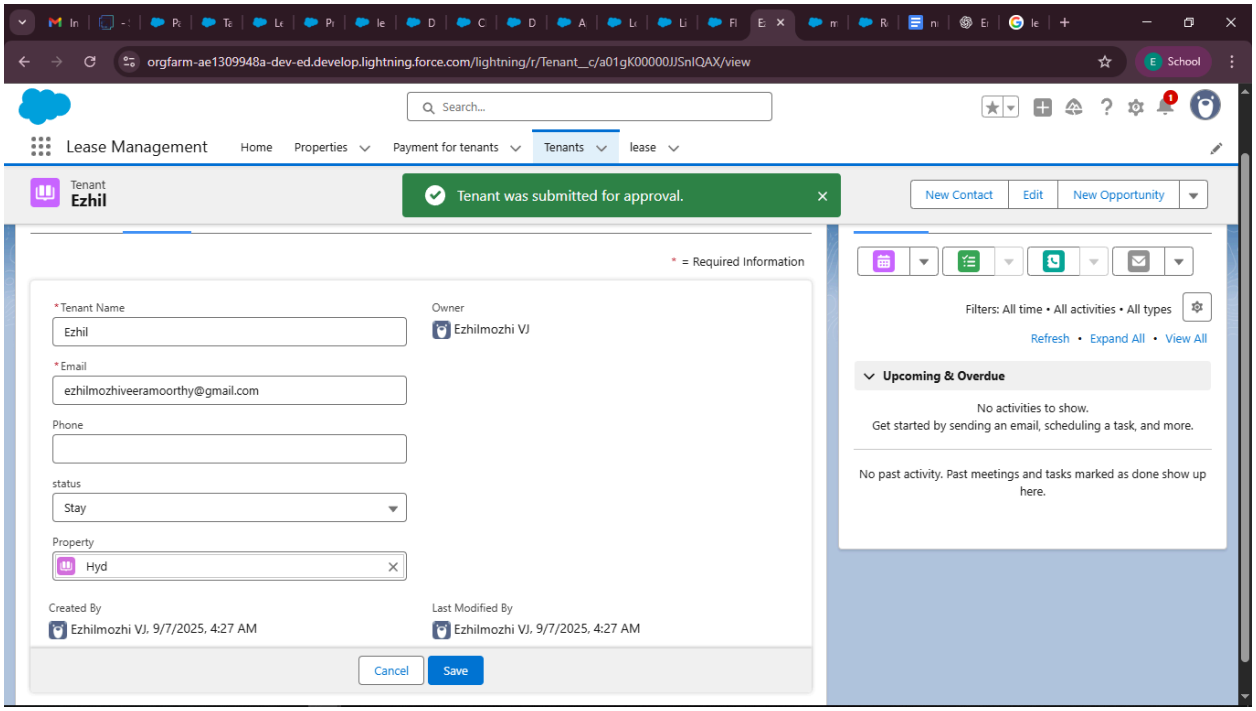

Upload files - Ezhilmozhi18/Lea
Documentation - Google Docs
Home | Salesforce
monthly payment - V1
orgfarm-ae1309948a-dev-ed.develop.lightning.force.com/builder_platform_interaction/flowBuilder.app?flowId=301gK00000J5e9yQAB
School
Flow Builder
monthly payment - V1
Select Elements
Auto-Layout
Last saved on 9/5/2025, 09:47 PM
Active
Run
Debug
View Tests
Save As New Version
Save
Deactivate
Record-Triggered Flow
Start
Object: Payment for tenanat
Edit
Trigger: A record is updated
Conditions: 1
Optimize for: Actions and Related Recor...
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Payme...
Run Immediately
Send Email Action 1
Action
End
Configure Start
Field
check for payment
Operator
Equals
Value
Paid
Add Condition
When to Run the Flow for Updated Records
Every time a record is updated and meets the condition requirements
Only when a record is updated to meet the condition requirements
Optimize Flow
Optimize the Flow for:
Fast Field Updates
Update fields on the record that triggers the flow to run. This high-performance flow runs before the record is saved to the database.
Actions and Related Records
Update any record and perform actions, like send an email. This more flexible flow runs after the record is saved to the database.
Is this flow making an external callout or connecting to an external system?
An asynchronous path is required for flows that involve external systems.

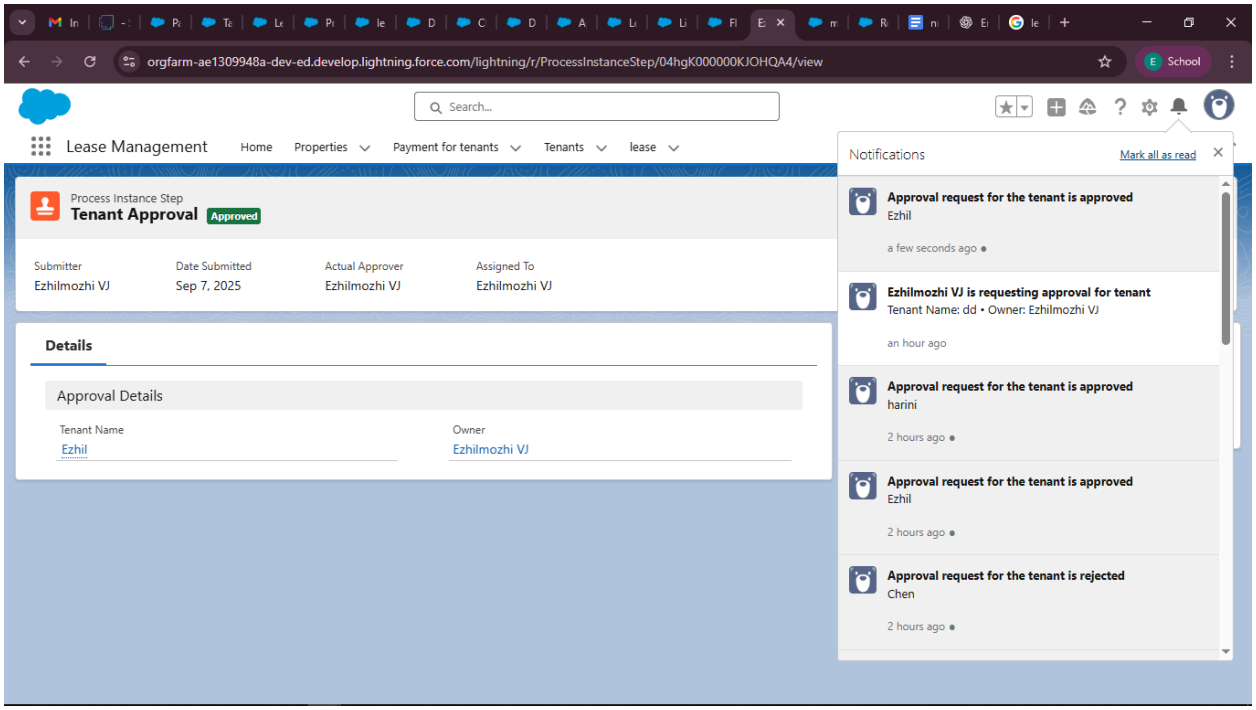
SCHEDULE CLASSES:





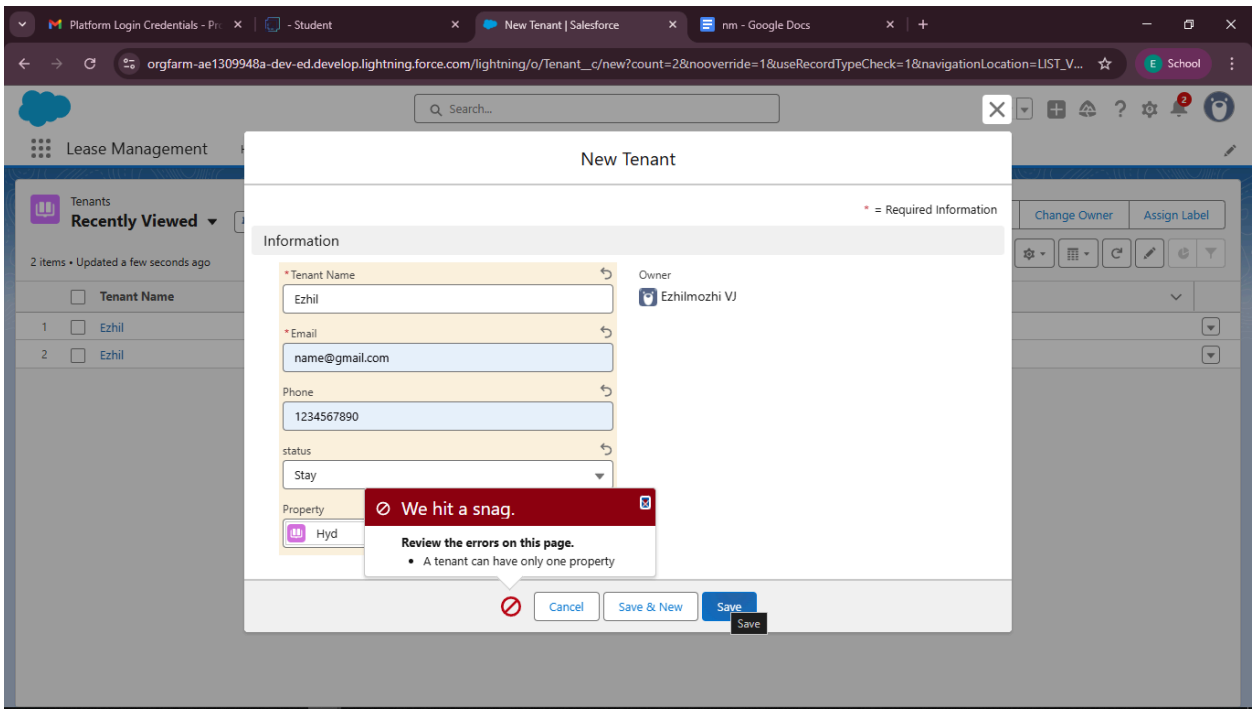

orgfarm-ae1309948a-dev-ed.develop.lightning.force.com/lightning/r/Tenant__c/a01gK00000JJSnIQAX/view
Search...
Lease Management
Home
Properties
Payment for tenants
Tenants
lease
Tenant
Ezhil
New Contact
Edit
New Opportunity
New Case
New Lead
Delete
Clone
Change Owner
Printable View
Sharing
Sharing Hierarchy
Submit for Approval
Related
Details
Tenant Name
Ezhil
Email
ezhilmozhiveeramoorthy@gmail.com
Phone
status
Stay
Property
Hyd
Created By
Ezhilmozhi VJ, 9/7/2025, 4:27 AM
Owner
Ezhilmozhi VJ
Last Modified By
Ezhilmozhi VJ, 9/7/2025, 4:27 AM
Activity
Filters: All time • All act
Refresh
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduli
No past activity. Past meetings and tasks
here.


orgfarm-ae1309948a-dev-ed.develop.lightning.force.com/lightning/r/Tenant__c/a01gK00000JJSnIQAX/view
Search...
Lease Management
Home
Properties
Payment for tenants
Tenants
lease
Tenant
Ezhil
Tenant was submitted for approval.
New Contact
Edit
New Opportunity
* = Required Information
* Tenant Name
Ezhil
* Email
ezhilmozhiveeramoorthy@gmail.com
Phone
status
Stay
Property
Hyd
Created By
Ezhilmozhi VJ, 9/7/2025, 4:27 AM
Owner
Ezhilmozhi VJ
Last Modified By
Ezhilmozhi VJ, 9/7/2025, 4:27 AM
Cancel
Save
Filters: All time • All activities • All types
Refresh • Expand All • View All
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.

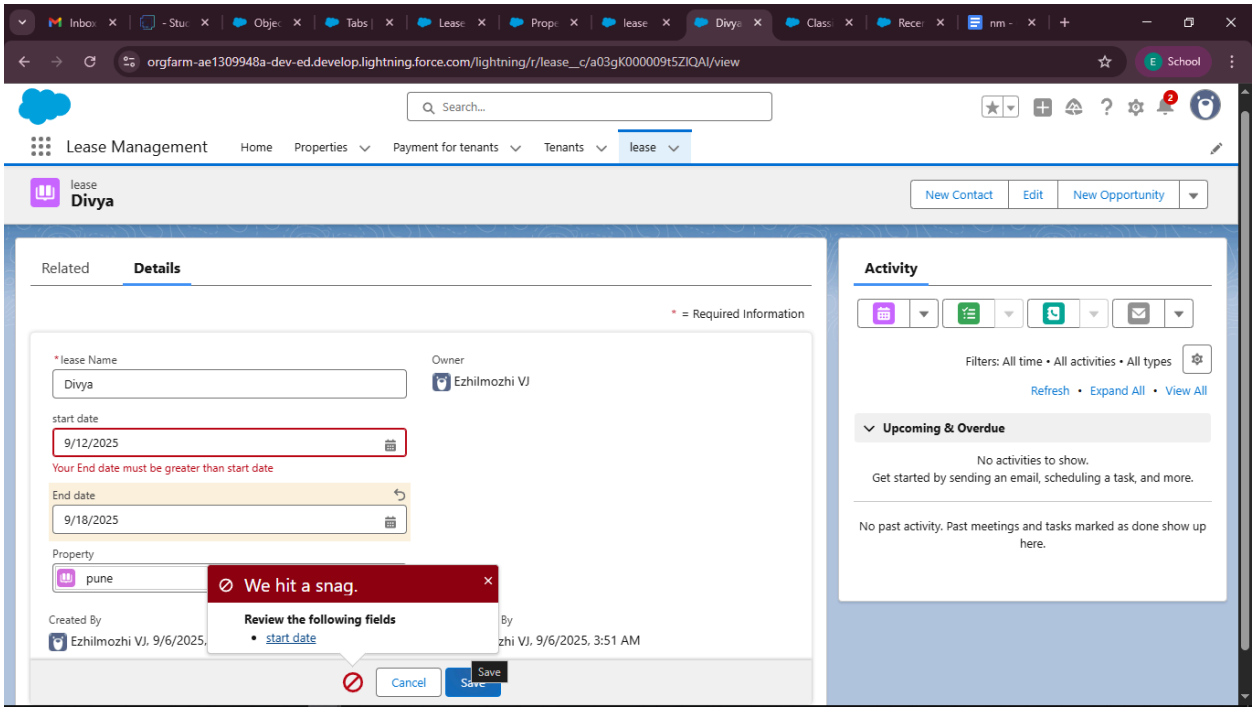


FUNCTIONAL AND PERFORMANCE TESTING:

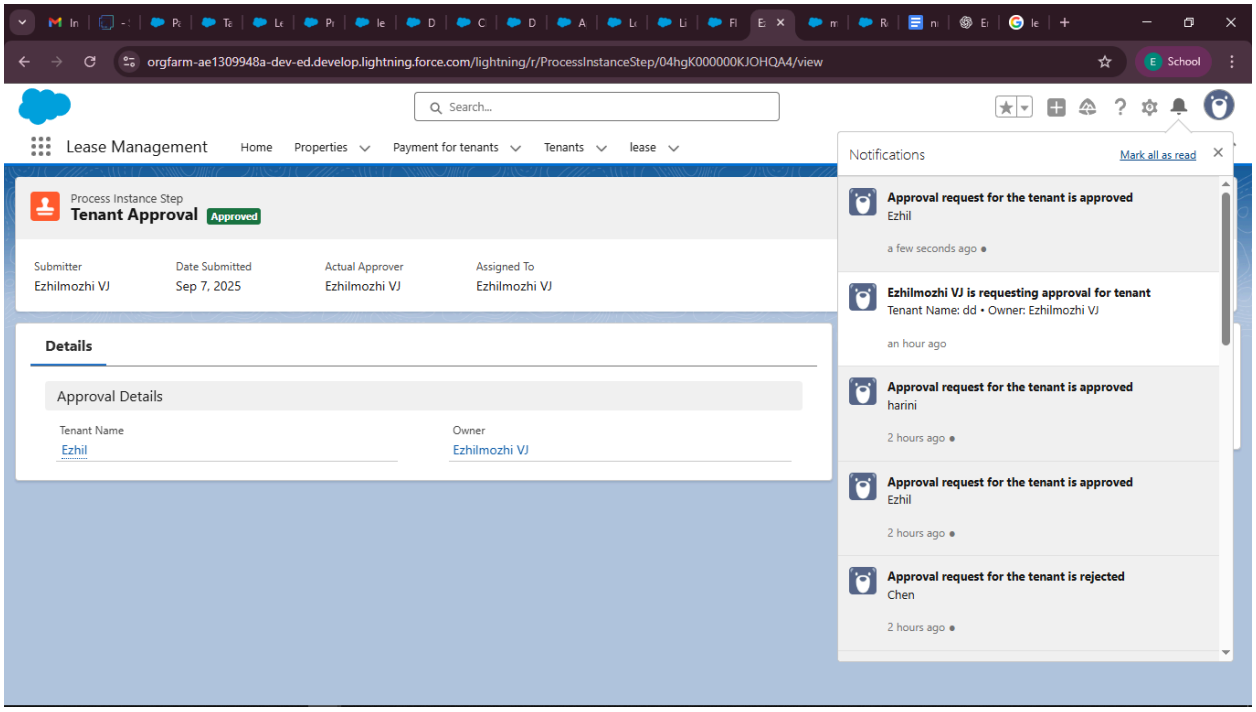
Trigger validation by entering duplicate tenant property records

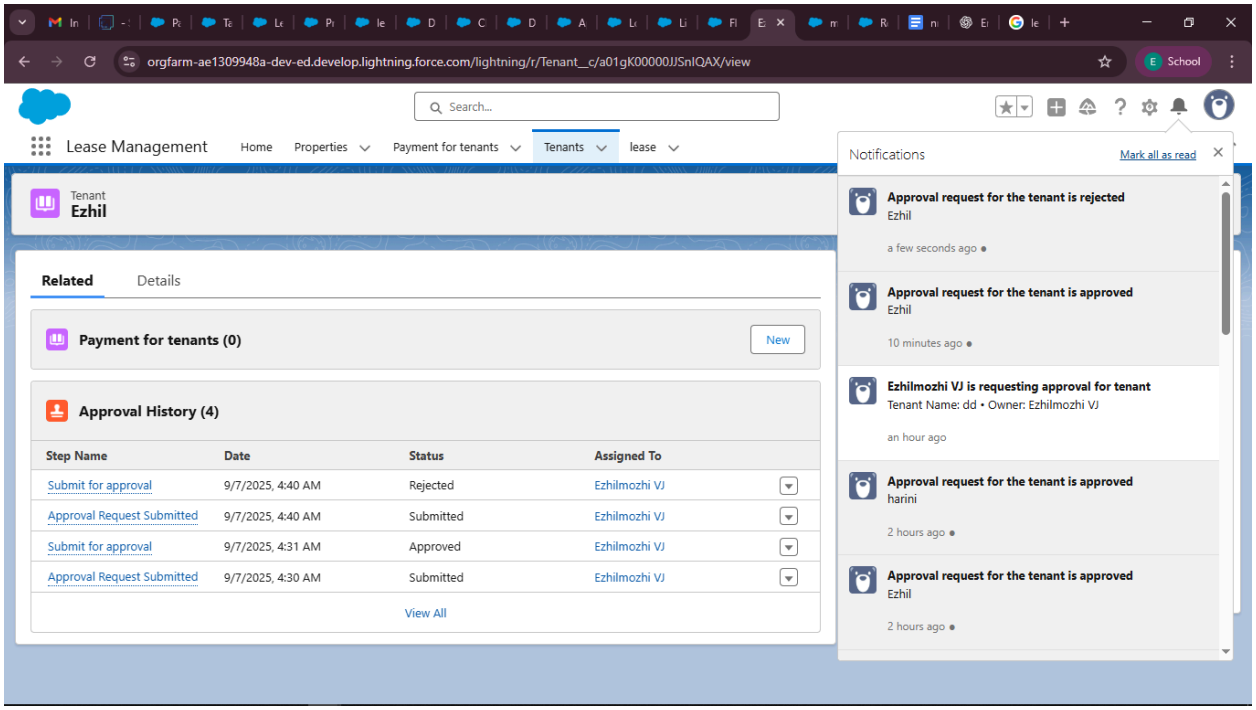


Validation rule checking:

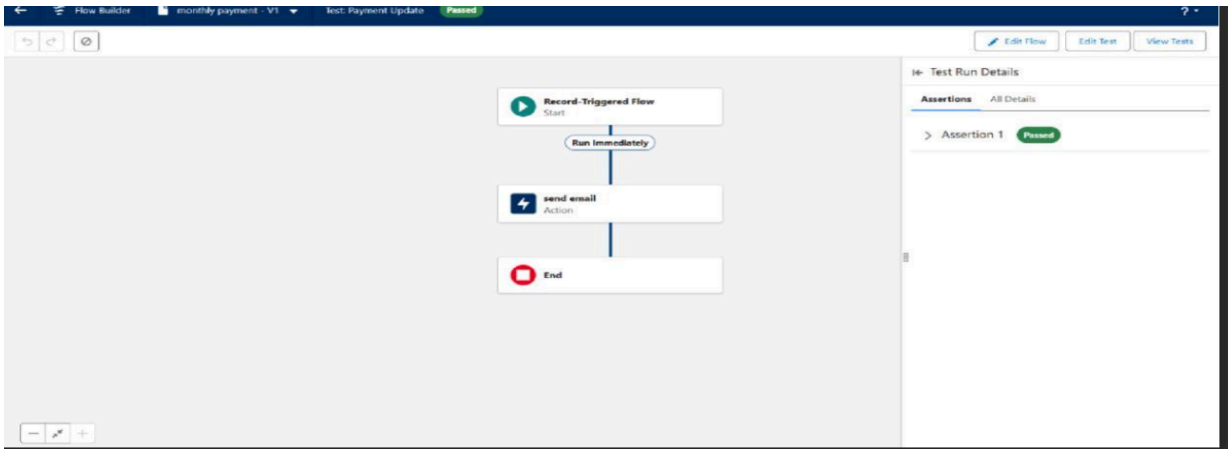


Approval process validated through email alerts and status updates:





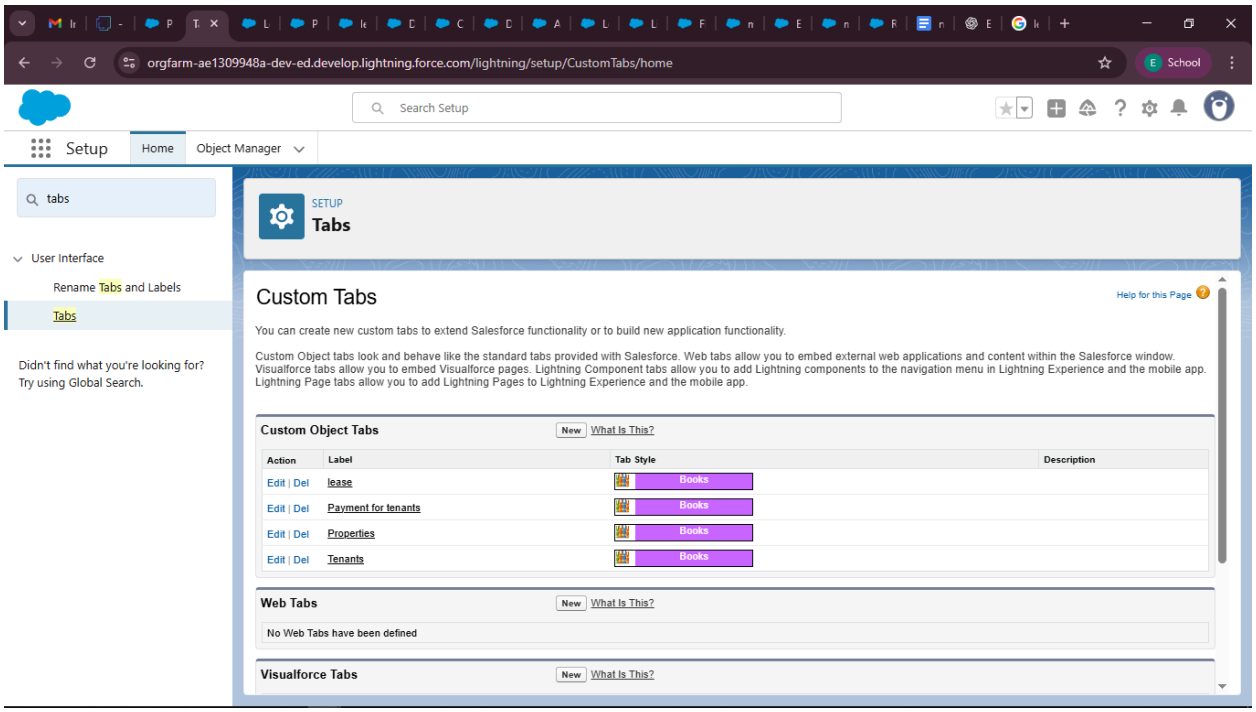
Test flows on payment update:



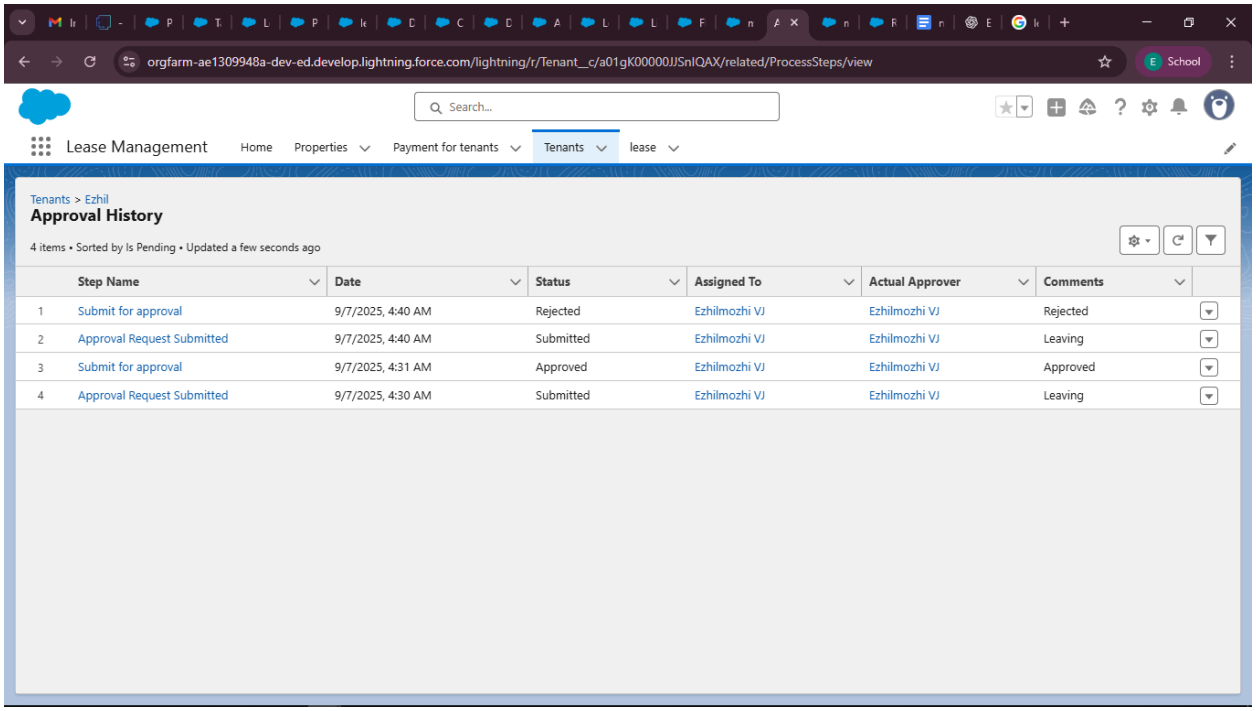
RESULTS

Output Screenshots

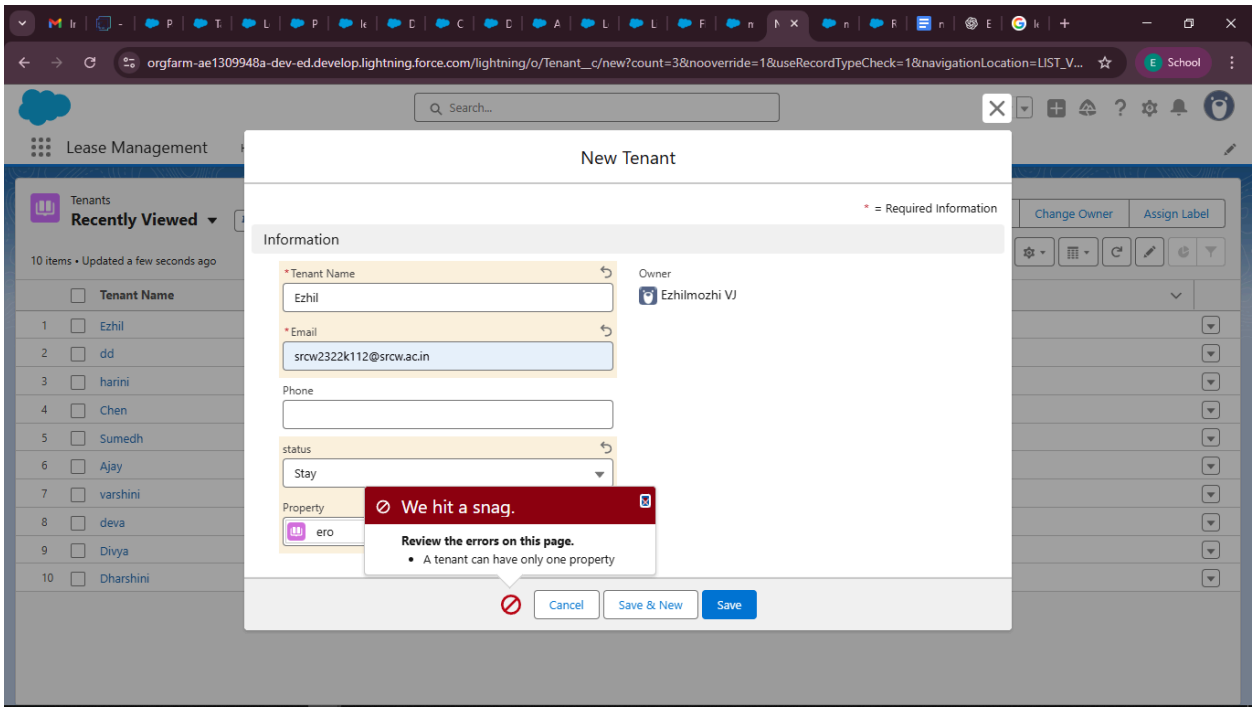
Tabs for Property, Tenants, Lease, Payment



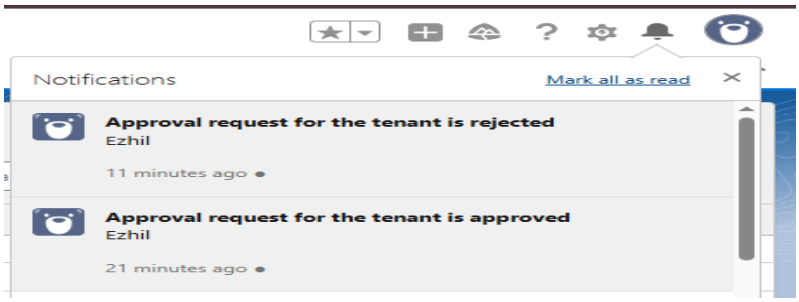
Email alerts



Trigger error messages



Approval process notifications



CONCLUSION

Lease Management ensures smooth coordination between property owners, tenants, and administrators by centralizing records, automating approvals, and tracking payments. With the use of structured processes, validation rules, and timely notifications, it enhances transparency, reduces errors, and improves efficiency in managing property leases.

APPENDIX:

Test.apxt:

```
trigger test on Tenant__c (before insert)
{
    if(trigger.isInsert && trigger.isBefore){
        testHandler.preventInsert(trigger.new);
    }
}
```

testHandler.apxc:

```
public class testHandler {
   public static void preventInsert(List<Tenant__c> newlist) {
        Set<Id> existingPropertyIds = new Set<Id>();
       for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c
WHERE Property__c != null]) {
            existingPropertyIds.add(existingTenant.Property__c);
        }

        for (Tenant__c newTenant : newlist) {

            if (newTenant.Property__c != null &&
existingPropertyIds.contains(newTenant.Property__c)) {
                newTenant.addError('A tenant can have only one property');
            }
        }
    }
}
```

MonthlyEmailScheduler.apxc:

```
global class MonthlyEmailScheduler implements Schedulable {
    global void execute(SchedulableContext sc) {
        Integer currentDay = Date.today().day();
        if (currentDay == 1) {
            sendMonthlyEmails();
        }
    }

    public static void sendMonthlyEmails() {

        List<Tenant__c> tenants = [SELECT Id, Email__c FROM Tenant__c];


        for (Tenant__c tenant : tenants) {
            String recipientEmail = tenant.Email__c;
            String emailContent = 'I trust this email finds you well. I am writing to remind
you that the monthly rent  is due Your timely payment ensures the smooth
functioning of our rental arrangement and helps maintain a positive living
environment for all.';
            String emailSubject = 'Reminder: Monthly Rent Payment Due';

            Messaging.SingleEmailMessage email = new
Messaging.SingleEmailMessage();
            email.setToAddresses(new String[]{recipientEmail});
           email.setSubject(emailSubject);
          email.setPlainTextBody(emailContent);

             Messaging.sendEmail(new Messaging.SingleEmailMessage[]{email});
        }
    }
}
```